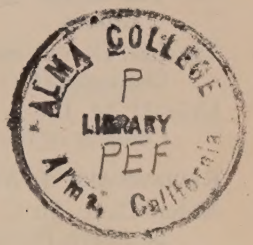
PALESTINE EXPLORATION QUARTERLY

Embodying the *Quarterly Statement* of the Palestine Exploration Fund and the *Bulletin* of the British School of Archaeology in Jerusalem



1948 & 1949

LONDON :
PUBLISHED AT THE FUND'S OFFICE,
2 HINDE STREET : : MANCHESTER SQUARE : : W.1

35402

1948-49

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Palestine Exploration Fund

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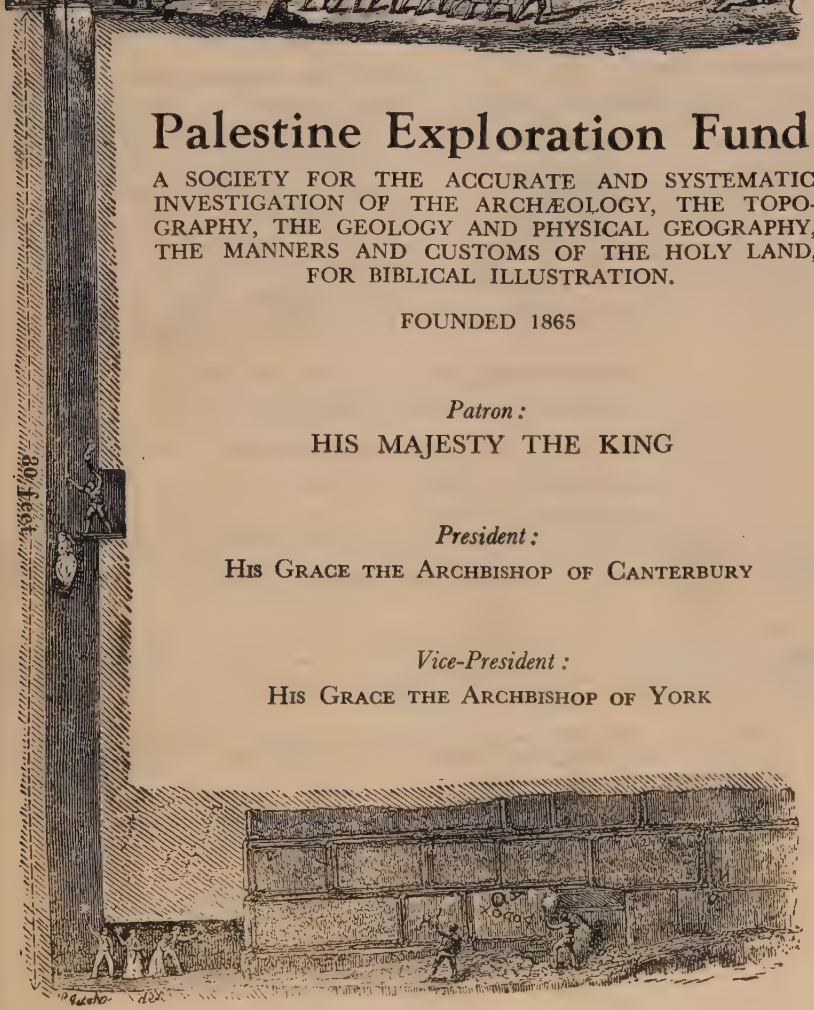

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THE PALESTINE EXPLORATION FUND

NOTES AND NEWS

VISITORS to the Rooms of the Fund at 2, Hinde Street, will notice a number of changes. First of all, they will miss the kindly and familiar presence of the Assistant-Secretary, Mr. G. J. H. Ovenden, who is retiring after a lifetime of devoted service to the Fund, and is going to make a new home for his family in New Zealand. All his many friends will wish him long years of health and happiness in the new surroundings of that prosperous Dominion. It is fitting that in bidding him farewell a brief but sincere tribute should be paid by the officers of the Fund and by the Editor of this journal to Mr. Ovenden's long and invaluable service to the Fund. Chairmen, Secretaries, and Editors, have come and gone, but Mr. Ovenden has always been there, quietly and efficiently helpful to visitors and students using the library of the Fund, and serving as an encyclopædia of knowledge in everything relating to the affairs of the Fund and to the history of excavation in Palestine. The Editor is particularly conscious of the great debt which he and previous editors owe to Mr. Ovenden's intimate acquaintance with all matters pertaining to the Fund, and to the generous help which has always been forthcoming from him in all the details of bringing out the Quarterly, no easy task during the difficult years through which we have recently passed. *Ave atque vale!*

But Mr. Ovenden's retirement coincides with an important change which makes available for the Fund the

very valuable services of Miss R. O. Wingate, M.A., as Assistant-Secretary. A happy arrangement has been made by which the Fund will share the use of its Rooms with an organization of kindred interests, the Royal Central Asian Society, of which Miss Wingate is the Secretary, as well as the Editor of its Journal. Miss Wingate is a Cambridge M.A., of Newnham, having taken her degree in History and Oriental languages. During the war she was a censor of books in the Ministry of Information. She has spent several years in Palestine and Syria, and has a knowledge of Turki. We are fortunate in having her expert knowledge and experience available for the work of Assistant-Secretary to the Fund.

The Royal Central Asian Society brings with it its own extensive library which will be housed in the Rooms of the Fund. To make this possible certain structural alterations have been carried out, giving more shelf space, and providing more office accommodation for the secretarial staffs of the two institutions. The archæological collection which has hitherto been on exhibition in the Rooms of the Fund has been lent to the Institute of Archæology of the University of London, where it is now housed with the Palestinian collections of Sir Flinders Petrie. Here it will be available for the use of students under the guidance of archæological experts, and still open for inspection to any members of the public who are interested.

In the present troubled state of Palestine, where Joel's prediction that the ploughshare should be beaten into a sword seems in process of fulfilment, the spade of the excavator is more likely to be used as an entrenching-tool for some time to come than as a means of throwing light on the past. Hence for the present, the activities of Palestinian archæologists are being directed mainly towards the arrangement and publication of the results of such excavations in Palestine as were being carried on or were already completed before the outbreak of war. The members of the Lachish expedition are engaged in the preparation of a further volume dealing with the results of the excavations at Tell ed-Duweir,

which it is hoped will soon be published. The Palestine Institute and the American Schools of Oriental Research have brought out in two fine volumes the results of the excavation of Tell en-Nasbeh. An account of the results of this important excavation, and a discussion of the much-disputed question of the identification of the site of Tell en-Nasbeh, are contained in the December 1947 issue of the *Biblical Archæologist.* This valuable publication, which we have often had occasion to recommend to students, has now, with the current issue, reached its tenth anniversary, and our hearty congratulations are extended to the editor, together with best wishes for a greatly increased circulation. Meanwhile Transjordan enjoys a measure of tranquillity, and archæological activities continue there. Messrs. Kirkbride and Lankester Harding published in a recent issue of this journal an account of their work at Hasma, of which we hope to hear more in the near future. The indefatigable Professor Glueck also continues his activities in the southern part of that region, and in the number of the *Biblical Archæologist* referred to above he has an interesting article on "The Civilization of the Edomites," a people whose history is so closely bound up with that of Israel.

An excavation of no small interest was undertaken in the summer of 1946 by the Ecole Archéologique of Jerusalem, under the direction of R. P. R. de Vaux, aided by Mr. R. W. Hamilton, the Director of the Department of Antiquities and his staff. The site was Tell el-Far'ah, near Nabloux, and is not to be confounded with the site of the same name to the south of Gaza, excavated by Sir Flinders Petrie, and identified by him with Beth-Pelet. The results of this excavation have been described in a preliminary report in the July and October issues, 1947, of the *Revue Biblique.* Various identifications have been proposed. Dalman, following a suggestion of Budde, favoured Gideon's Ophrah ; Albright has put forward Tirzah as a claimant for the site ; while R. P. Abel would identify it with Bethbarah of Jud. 7, *24.* The first excavations showed an occupation ranging from Middle Chalcolithic to Iron Age II.

In the July 1947 issue of the same journal, R. P. H. Cazelles, whose recent study of the Book of the Covenant has attracted much attention from O. T. scholars, has an interesting short article on the so-called " converted " Hebrew tenses in the light of the Ras Shamra texts. The learned Father does not refer to Professor Driver's monograph on *Problems of the Hebrew Verbal System*, T. T. Clark, 1936. It would be interesting to know whether Professor Driver finds anything in the new material from Ras Shamra which calls for a footnote to his monograph. R. P. Cazelle's book will be reviewed in this journal in due course.

In the light of the present situation in Palestine an article in the October 1947 issue of the *Jewish Quarterly Review* is of special interest. It is by Professor Solomon Zeitlin, and is entitled *Jewish Rights in Palestine*. Its purpose, in the words of the author, is " to review the sources to be found in Jewish, Christian, and Mohammedan literature which throw light upon the religious, historic, and legal claims to Palestine." It is, however, doubtful whether claims necessarily constitute rights. The religious claim, as formulated by Professor Zeitlin, is well-known, and rests upon a particular theological assumption, namely, that Palestine has been given by God to the Jewish people. However well-grounded such a claim may be, it belongs to the field of theology, and not to the realm of international law. In that period of ancient history when the Hebrew tribes were making their settlements in Canaan, partly by conquest, partly by peaceful infiltration, it was customary for the conquest of one people by another to be attributed to the activity of the god of the victorious people. In Jud. xi, 24, Jephthah is represented as recognizing that the Moabite claim to possess Moab as the gift of Chemosh is of equal validity with the claim of Israel to possess the territory which Jahveh had given to them. A somewhat cursory survey of the history of Jewish occupation of Palestine yields the residual fact that there have always been some Jews resident in Palestine, a somewhat slender base for a claim to right of

possession of the land. The third head, the legal basis of the Jewish claim to Palestine, amounts to the curious claim that Palestine was never legally a part of the Roman empire, and that consequently the subsequent conquests of Palestine by the Mohammedans and the Turks never deprived the Jews of the title to the land.

In the *Journal of Near Eastern Studies* for October 1947, Professor Kraeling has an interesting discussion of that difficult passage in Gen. vi, 1-4, continuing his earlier discussions of the Flood Stories in other journals. The dependence of the Hebrew Flood Stories upon earlier Babylonian and Sumerian forms of the myth is now generally acknowledged, and the particular point dealt with in Professor Kraeling's article is the question whether the passage in Genesis referred to above did not, in its original form, provide an earlier explanation for the sending of the Flood. In the various Mesopotamian forms of the story the reason for the Flood is ascribed to the fact that the noise of mankind disturbed the sleep of the gods. Such an unmoral cause of the Flood would not commend itself to the later Hebrew editors, writing in the light of a more fully developed ethical conception of God, and they, accordingly, ascribed the Flood to the sinfulness of mankind. But between these two extremes Professor Kraeling would place an early Hebrew tradition, preserved in Gen. vi, 1-4, which ascribes the Flood to the behaviour of the *gibborim*, the " heroes " or " giants," who correspond to the Cyclopes and Titans of Greek mythology, and who, in the fuller account of which Gen. vi, 1-4 is a fragment, sought to scale heaven, and were destroyed by Jahveh in consequence.

Epigraphers and those interested in the history of writing will be interested to know that Dr. David Diringer, the author of two standard works on Semitic epigraphy, has re-written his Italian *History of the Alphabet* in a much expanded form embracing the whole history of the origin and development of writing, and that the book has now been published by Messrs. Hutchinson. It will be reviewed in

this journal in due course. Dr. Diringer has already contributed several articles on Semitic epigraphy to the Palestine Exploration Quarterly.

An article by Professor Albright in the *Journal of the American Oriental Society for July-September*, 1947, whose importance is out of all proportion to its brevity, deals with the *Phœnician Inscriptions of the 10th Century from Byblus*. It is generally known that, as the result of increased knowledge, the date of the Ahiram inscription, formerly assigned to the 13th century B.C., has now been brought down to the 10th century, together with other inscriptions from the same source. In this article Professor Albright gives a fresh translation of this group of inscriptions, with full notes on the various epigraphic and grammatical points which they raise. He remarks that " these 10th century inscriptions have two particularly significant aspects : (1) the light which they shed on the question of Ugaritic-Phœnician relationship ; (2) the light which falls from them on the orthography of Hebrew." Professor Albright appends to his article a valuable list of the kings of Byblus known to have flourished after circ. 1100 B.C.

Two other articles of interest appear in the same journal. One by Professor Kraeling on *Xisouthros, Deucalion and the Flood Tradition*, supplementing his discussion in the *Journal of Near Eastern Studies* already referred to. The other is by Professor Julian Obermann in which he continues his studies in the Ras Shamra texts ; it is entitled *How Baal Destroyed a Rival*. It is to be hoped that more of the younger British scholars will devote attention to these immensely important documents. Professor Obermann has an interesting discussion on the theme of the " magic weapon " which so often appears in early Semitic mythology.

In the April-June 1947 issue of the *American Journal of Archæology* there is an important article by F. R. Steele on the Law Code of King Lipit-Ishtar. While it has generally been recognized that the Code of Hammurabi contained earlier Sumerain laws, it has also been supposed that to

Hammurabi belonged the credit for the first codification of Mesopotamian law. The re-discovery of fragments of a Sumerian code which were actually dug up at Nippur by the University of Pennsylvania expedition before the discovery of the Hammurabi stele, makes it certain that at least 150 years before Hammurabi, Lipit-Ishtar, the fifth king of the Isin dynasty, had promulgated a formal code of Sumerian law.

Attention may here be called to three pamphlets of interest. The first is the report of the Princeton Bicentennial Conference held in 1946 to discuss the problems of the Arab and Moslem world ; it is entitled *Near Eastern Culture and Society*. Professor Gibb, the Laudian Professor of Arabic at Oxford, made important contributions to the conference. The second is by Professor Jirku of Bonn, entitled *Die ältere Kupfer-Steinzeit Palästinas und der bandkeramische Kulturkreis*. The third is a useful summary of the present state of knowledge concerning the Hittite language and culture by Mr. F. F. Bruce, entitled *The Hittites and the Old Testament*.

KING SOLOMON'S TEMPLE AND OTHER BUILDINGS AND WORKS OF ART

By J. L. Myres

What follows is an attempt to visualize and reconstruct some features of one of the few monuments of oriental architecture of which a literary description has been preserved, Solomon's Temple in Jerusalem, a building of the tenth century B.C., constructed by Phœnician craftsmen, regardless of expense. Some of the technical terms were apparently unfamiliar to later compilers, if not to the original writers, and still more unfamiliar to the LXX translators, who left some of the most important untranslated. Other misunderstandings have resulted from the idiomatic uses of words for "length" and "breadth" in a composite building, and of "forepart" for an inner room (A.V. 1 K. vi, 20 : V. rightly *in interiori parte.* R.V. "in the midst of the house within.")

That some parts of the description are clearly intelligible, has long been recognized ; the dimensions and proportions of the principal buildings, and the use of stone, cedar and other woods, and gold overlay. In others, there is much repetition, with variations which suggest that all versions rest on composite sources, carelessly compiled and not much edited. What is surprising is that monuments which remained in public view for centuries were so differently described in detail. Ezekiel's "vision" is on a different plane ; it is the memory of a devoted servant of the Temple, writing in exile, and concerned rather with form and function, than with ornament ; though his pairs of cherubim confronted about a palm-tree are unique and valuable detail. In the Hebrew vocabulary there is the further difficulty, that popular terms—"hands," "shoulders," and the like—are used in secondary senses : they may be either technical terms or the ingenuous descriptions of a layman.

It is only recently that archæological comparisons have been possible, with buildings at Sinjirli and Carchemish, utilized by Mohlenbrink, *Der Tempel Salomos* (1932), and Watzinger, *Denkmäler Palästinas* I (1932). More recent are Wright, *The Biblical Archæologist*, IV, 2 (May, 1941), and the summary of Albright, *Archæology and the Religion of Israel* (Ayer Lectures) 1942, 142 ff, using the small ninth-century temple excavated at Tell Tainat in North Syria in 1936, by C. C. McCown, *Am. Journ. Archæology*, 1937, 9, fig. 4 : and by Watzinger, *Handb. d. Archäologie*, 1938, 505-16. This temple, about two-thirds the size of Solomon's Temple, had a main hall, between a portico with two columns and a rearward shrine with a raised platform : but it had no side-chambers. Much light has been thrown on the characteristic panelling and inlaying by finds of carved ivories at Megiddo and Samaria, and by " proto-æolic " capitals : Loud, *The Megiddo Ivories*, 1939 ; Crowfoot, *Early Ivories from Samaria*, 1938.

But important problems of construction remain to be solved, and the form and purpose of the Two Columns is still uncertain, even after Albright's ingenious reconstruction of them as incense-burners (l.c. 143 ; cf. BASOR 85), as suggested long ago by Robertson Smith (*Lectures in the Religion of the Semites*, ed, 1894. 487-490) : see p. 29 below.

Obviously, interpretation and reconstruction must begin from the Hebrew text. To determine the philological meaning of the Hebrew words, which are not necessarily craftsmen's terms, but words from ordinary speech—" hands," " shoulders," " chainwork," " lilies "—applied by an untrained observer to works of art outside normal experience, I have had the valuable help of a literal translation by Professor Godfrey Driver.

To the brief Hebrew description, both the Septuagint and the Vulgate add many interesting but often obscure details, representing fuller Hebrew texts which do not always agree with each other ; and sometimes the Septuagint recensions differ among themselves. Evidently attempts were made to preserve and co-ordinate traditional accounts,

even where they were not understood : hence the transmission of some Hebrew words untranslated, and the omission of others which the Massoretic Text has preserved. In the Septuagint, some Greek words do not occur elsewhere with the meanings of the Hebrew words which they represent. At best, the Septuagint translators may have seen, or heard, contemporary descriptions of the restored Temple of Ezra and Nehemiah : when the Latin versions were made, even Herod's Temple had been destroyed.

The Temple and Sanctuary.

The construction of the Temple itself is simple and clear : 60 x 20 cubits, and 30 cubits high (LXX 25 cubits), with a porch 10 cubits deep, of the same width. There were windows (v. 4 : cf. 7, 5) in the upper part of the walls, in the main chamber only. The " fixed lattice work " of R.V., and " broad within and narrow without," R.V. mg., are attempts to render the obscure Hebrew (" windows with closed-in frames " D.) with the help of LXX *parakuptomenas kruptas ; diakuptomenas* (Θ) *; kai ekthetas episkepontas* (Σ) *; apoblepousas bebusmenas* (A) ; *dediktuōmenas* (Luc.) ; *fenestras obliquas* (Vulg.) ; *prospicientes absconsas* (Vet. Lat.). In some fashion these windows admitted light, but were made inconspicuous from without, by shutters, louvre-boards, or lattices. The reason for this is given in Patai, *Man and Temple*, 1947, p. 85 : refs. p. 101, n. 99 : terrestrial light was excluded, but the divine light from within could shine outwards.

The inner sanctuary was panelled with cedar from floor to ceiling (v. 15, where " 20 cubits " should refer to the height as well as the breadth, as in v. 20) and consequently had no windows, as it was not only entirely surrounded by the " side-chambers," but also had a space of 10 cubits between its ceiling and the structural roof (*Middoth*, 4, 5, quoted by Burney, *Kings*, p. 66).

The structure of the roof was elaborate, v. 9 : it consisted of " cedar " (M.T.) " beams and planks " (R.V.), forming recessed panels (" pits " or " cisterns " : LXX, " coffers

and cross-beams," *phatnōmasin kai diataxesin kedrois*. Vulg. *laquearibus*) with longtitudinal and transverse frames : Targ. distinguishes the " rafters " from the ceiling of cedar boards. But all this was internal enhancement. How was the Temple roof itself constructed ?

The internal span, 20 cubits, was considerable, between 35 and 40 feet, comparable therefore with our larger college halls. There were no internal columns, and there is no mention of struts or brackets, as in the " House of the Forest of Lebanon." It was not impossible to span such a width with single beams merely resting at each end on the side wall ; but there was serious risk of sag and lateral thrust.

It is at this point that M.T. introduces the three tiers of side-chambers : (M.T. " rib," D : LXX, *pleura* (v. 6) : *endesmon-ous* (v. 10) : Vulg. *tabulatum*), with stress on the transverse party-walls, on the " rebates " or " offsets " which carried their floor-beams, and on their independence of the side-walls of the Temple itself, on these " rebatements " on which they rested. These chambers themselves were not built for regular residence ; no windows are given them ; they were served only by a spiral stair, or trap-door (Pesh. followed by Burney : " traps " D.) ; and nothing is said of their contents. It may be inferred that their purpose was functional, as LXX *endesmon* suggests, though the beams were " struts " rather than " ties." Their outer walls, and the floor-beams abutting on the " offsets " or " rebatements " (D.), of the Temple walls, were in effect a continuous buttress against thrust from within ; and as the inward ends of the floor-beams were free, it was possible at any time to enter by the stairs or trap-doors, and ascertain whether any such thrust had occurred. On the other hand, the roof-beams of the upper side-chambers expressly did " grip " the main walls v. 8 (D.) ; see fig. 1.

Moreover this outer shell of masonry could, and probably did, serve another purpose also. In Greek temple-architecture the external colonnade with its heavy entablature—

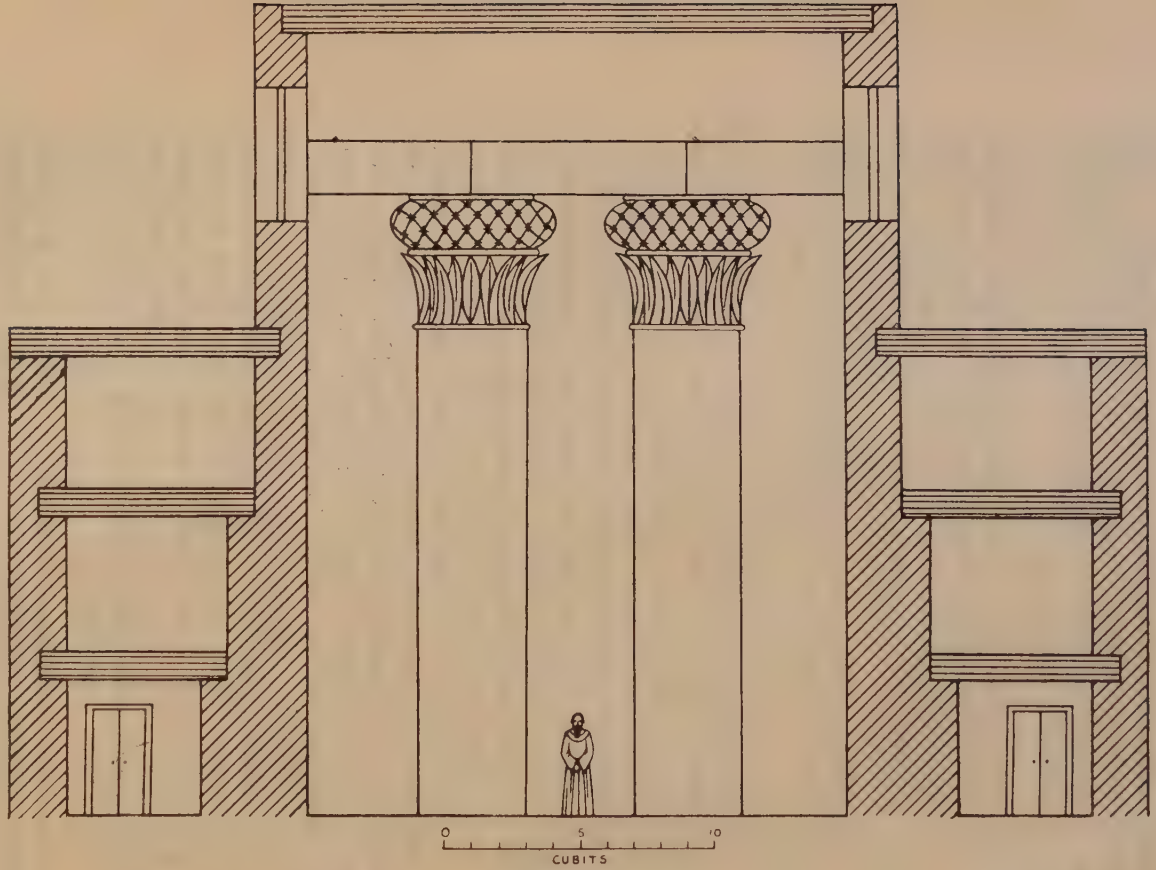


FIG. 1

Transverse Section of the Porch and Side-Chamber of Solomon's Temple
The windows are those of the Main Chamber behind the Porch

the wooden prototype of which has left its marks in the triglyphs and metopes of the Doric "order"—served not only to reinforce the walls, but carried the projecting eaves of the roof construction far outside the walls of the chambers. If the three storeys of chambers were each only 5 cubits high (v. 10), their total height including the thickness of their floors, ("15" cubits in v. 10, D.), was not much more than half that of the main walls of the Temple : so their outer walls could not support the roof-eaves ; moreover, if they had risen above the roof of the third-storey chambers, they would have obstructed the windows (v. 4) which should have been a clerestory above the side-chamber roofs. But in 1 K. vi, 10, Vulg. *tabulatum super omem domum quinque cubitis altitudinis*, describes a

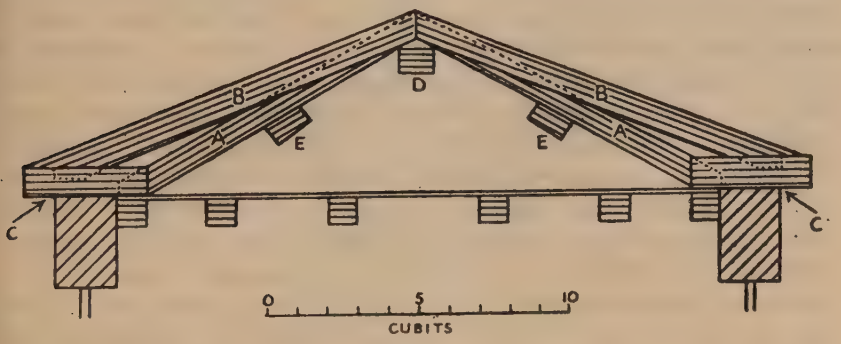


FIG. 2

Suggested Re-construction of Roof of Solomon's Temple

roof-space above the main chamber as well as the sanctuary (v. above), and leaves the height of the side-chambers unnamed. If this version is adopted, the outer walls of the side-chambers may have risen to the height of the main walls (30 cubits) and supported a low gable roof of the kind now to be described. If so, the windows were mere ventilators into the upper-storey chambers.

For here is a modification of the same type of roof as was used in Greek temples, which enabled a much wider space to be spanned than was possible with single beams laid from

wall to wall. It was rediscovered by the late George Jeffreys in churches of uncertain age in Cyprus, and detected in a Hellenic temple at Girgenti (*Archæologia*, lxxviii (1928) 37-60.) it dispenses not only with beams from wall-to-wall, but even with tie-beams to hold the walls together, and depends for stability solely on the solidity of the walls themselves and the colonnades. The principals in this type of roof (see fig. 2) are in pairs (AB), supported respectively on the inner and outer margins of a timber wall-plate (C), of the full thickness of the wall, or more, and are connected at their free ends (D), where each such triangular member meets the apex of one resting on the opposite wall. So long as the wall-plates are secured to the walls, and the walls resist the outward thrust, such a structure cannot collapse, and needs no internal tie-beams or king-posts ; and a 30-cubit span needed only principals of 16-18 cubits length. Timber, moreover, is much more resistant to pressure lengthways than transversely. All that such a roof-construction needs is a ridge-pole (seen endways at D) into which the apex of each pair of principals is mortised, to prevent lateral thrust along the ridge : and further security may be given by lateral beams (EE). Hence the functional plan of the timbering, seen from within—if there is no ceiling—is a series of rectangular panel-frames, and the ceiling-design was a series of deep panels or coffers, as described in v. 9 : LXX, *phatnōmasin* (mangers) *kai diataxesin* (" cross-pieces ") *kedrois ;* Vulg. *laquearibus* (coffer-ceilings). The principals are *dokoi*, " beams," in LXX (" rafters," Burney). Or there may have been a flat ceiling independent of the structural roof.

The cedar panelling of the main chamber (v. 18) and of the sanctuary (" oracle " R.V.) presents no difficulty : the ornament of " gourds " (" colocynths " D. " knops " A.V., R.V.) and " open-flowers," (i.e., rosettes) is common to Egyptian and Babylonian art. For the " chains of gold " M.T. uses the same word as for the " chains " or " wreaths " of the Two Pillars (p. 24 below).

If the partition between the main chamber and the " oracle " was of timber (v. 16), it is difficult to explain the

description of the door-way (v. 31). The M.T. *ḥamshith* should mean "pentagonal" (Burney, D.), but LXX *phlias pentaplas* means "five-fold," and Vulg. *postes angulorum quinque* must refer to the cross-section of the door-posts, not to the shape of the door-opening, as most of the commentators have supposed. Nor can the phrase refer to the leaves of the folding-doors; for these must have been an even number, and are described as "four" in vv. 6 and 34. If the partition was of timber, there was little thickness for a massive door-frame; but if it was of stone, the sides of the opening would have to be lined with a rebated or chamfered door-frame; in horizontal profile as in fig. 3.

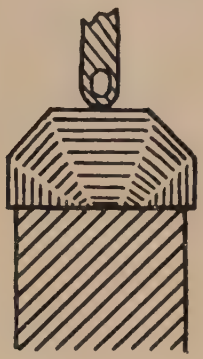


FIG. 3

The 'five-fold' door-frame

(horizontal section)

It is not clear, in v. 34, whether there were two inner doors and two outer, or two pairs of folding doors, each of two hinged "leaves," the revolving "ribs" of M.T. The latter is more probable. Ancient doors literally "revolved" on a pivot in sockets above and below. In the Cretan palaces, folded-doors were set in counter-sunk jambs, so that they left the whole doorway clear. Compare Ezekiel's description (41, 23):—"and two doorways for the sanctuary and the

temple ; two doorways for the two revolving doors ; two doors (i.e., door-leaves) for the one, and two for the other," where the same word *thurōmata* is used for the doorways and the doors. In v. 20 the " overlaying " with gold offers no difficulty. Heavy gold plating is possible but unlikely ; gold leaf has many ancient parallels. Burney's " liquid gold " is obscure, because amalgam-gilding (as on silverware) is not practicable on wood, and the lustre-ware described in Prov. xxvi, 23 also results from firing ; cf. 2 K. xviii, 16. The " choice " or " precious " gold (" red " in M.T.) was unalloyed, in contrast with the natural alloy of gold and silver (*electrum*) much used in antiquity, and distinguished by its pale colour as " white gold."

The relation of the golden chains (v, 21) to this cross-wall and door-way is not clear : 2 Chron. iii, 14 and Ezek. xli, 23 describe a curtain (LXX *parapetasma*). But a chain would prohibit access to the " oracle " while allowing the doors to stand open.

Jachin and Boaz. I K vii, 15 ff.

" He cast two pillars of brass (bronze) of eighteen cubits high apiece (2 Chron. iii, 15, thirty-five cubits) ; and a line of twelve cubits did compass either of them about " ; LXX, " fourteen cubits surrounded the thickness of the columns " is another approximation to a *diameter* of four cubits. While the ratio 4 : 18 makes the columns rather short and thick, especially beneath capitals of five cubits ; the ratio 4 : 35 (as in Chron.) makes them very tall and slender, and moreover five cubits higher than the Temple itself.

M.T. gives two further details : " the thickness of the pillar was four fingers : it was hollow " : LXX, *tessarōn daktulōn ta koilōmata* transfers to the hollow interior the thickness of the bronze tube. The Greek phrase *koilōmata* might refer to external flutings, but there is no further reference to such adornment. Vulg. omits the phrase altogether.

The Capitals of the Two Pillars. 1 K. vii, 16. " And he made two chapiters (Vulg. *capitella*) of molten brass, to set upon the tops of the pillars " : LXX *epithemata* merely expresses this superposition, and is used elsewhere of " architraves." Their height was 5 cubits, with which 2 Chron. iii, 15 agrees ; rather high for a column of 18 cubits, but short for 35 cubits.

Of these capitals two distinct descriptions are given ; the first very complicated, also described in M.T. as *habbeṭen* (" the belly " R.V.) ; the second simple, " after the fashion of a lily," and placed expressly " upon the top of the pillars, so was the work of the pillars finished," 1 K. vii, 19, 22. But as the net-work of the former description was " to cover the chapiters which were upon the top " 1 K. vii, 18, it looks as though the whole capital consisted of an upper and a lower member, of which the latter only was immediately on top of the column. Moreover the total height of the capital being 5 cubits, the height of the " lily-work," 4 cubits, leaves 1 cubit as the height of the " net-work " member : Jer. lii, 22 however, writing from memory, assigns the whole 5 cubits to the net-work and pomegranates.

Reserving the question, which member was really uppermost, let us begin with the 4-cubit " lily-work " expressly set " upon the top of the pillars," 1 K. vii, 14, 22. This is the expanding calyx of a flower, the well-known " lotus capital " of Egypt, with its long over-lapping petals expanding upwards and curving outwards.

In what sense was this part of the capital " in the porch," v. 19 (LXX, *kata to ailam*)? The word *ailam* defeated the Greek translators, but it seems to recur as a rare architectural term in Greek ; *alean eis to thurōma kai psalidas*, " a hollow cornice to the doorway and (convex) mouldings " : inscription from Callatis, *Rev. Archéologique* V. xxi. 226. inscr. 2 : 11 38-39. The word *alea* is old Greek, meaning " shelter " from rain, Hes. *Op.* 545, or " refuge " generally, Hom. *Il.* 22, 301. Either it became a popular etymology for Semitic *ailam*, or *ailam* itself as a Greek builder's term, was borrowed from Semitic craftsmen. In Ex. xxvii, 10, 11, LXX has

psalides tōn stulōn (Vulg. *caelaturae*) for convex mouldings on the poles of the Tabernacle. It is tempting to render *kata to ailam* here as "in the shelter" or concavity of the lily- or lotus-profile. But as it is used also in this passage for the open portico of the Temple, and for other porticoes of king Solomon, it is perhaps safer to regard it as interpolated here from a confused text, like *en tō dabeir* in 2 Chron. ii, 16.

The other member of the capitals is described repeatedly and in detail; first the superficial decoration of "chains" or "wreaths" with rows of "pomegranates"; only later the shape of this member itself is given. The "two bowls of the chapiters that were on the top of the two pillars" (1 K vii, 17, 41; cf. 2 Chron, iv, 12, "pommels") were certainly convex in profile, like the *psalides* of Ex. xxvii, 10, 11. The Hebrew words in 2 Chron. iv, 12, left untranslated in LXX, *gōlath tē chōthareth* are *gullah*, "round bowl" (whence Greek *gaulos*, "tub"); and *kothereth*, "capital," akin to *kether* whence Greek *kidaris*, "turban," used also for a "sea-urchin," like *echinus*, the architect's word for a Doric capital; so *gōlath* is well translated "belly" in A. V. Clearly this was a convex member of considerably greater diameter than either the column or the "lily-work" member of the capital. As the "lily-work" was 4 cubits high, only 1 cubit remained for the height of the "belly" or "pommel," and if the vertical diameter of its curved profile was 1 cubit, the radius of curvature was half-a-cubit, and the "belly" projected by this amount (at least) beyond its support. Its diameter over all was thus 5 cubits at least.

Whereas the only ornament of the "lily-work" was the upright flower-petals, the decorative scheme of the convex "belly" was transverse or oblique. It consisted of "net-work" (LXX, *diktua*) cf. 2 K. i, 2 for a "window-lattice" "checker-work," or "wreaths of chain-work," 1 K, vii, 17; "two rows round about . . to cover the chapiters which were upon the top with pomegranates": cf. 2 Chron. iv, 13, "two hundred pomegranates on each wreath to cover the two pommels." For the "net-work" (LXX, 2 Chron. iii, 5, 16, *chalastōn*, i.e., "slung" or "slack" festoons) the

same word *sharsheroth*, LXX, *serserōth* (from *sharar*, " twist ") is used as in Ex. xxviii, 14, 22 : xxxix, 15 for the chains which suspended the High Priest's breastplate, and in 1 K. vi, 21 for the " chains of gold " (A.V.), hung across in front of the " oracle " in the Temple.

If the diameter of the " belly " was 5 cubits, its circumference was nearly 17 cubits ; so, with 100 pomegranates in a row, there were 5 or 6 to a cubit. Each pomegranate therefore occupied not more than 1/5 cubit, or between 3 and 4 inches, and much less if they were spaced upon a " wreath." Probably each " pomegranate " marked an intersection of the " net-work " pattern, and consequently alternated with the pomegranates in the other " wreath " (LXX, *stichos epi stichon* : " line upon line "). The " net-work " thus completely covered the " belly " of the capital ; and was in such high relief that it was properly described as " suspended " work. (1 K. vii, 17, LXX, *ergon kremaston*). It may even have been built up of links or meshes. In 2 Chron. iii, 16 the reference to the " chains in the oracle " is a comparison with similar network or festoons (1 K. vi, 21) : but in 1 K. vi, 21 Vulg. has a different phrase, *et affixit laminas clavis aureis*, referring to the gold-plated panelling of the main chamber with prominent nail-heads.

For a close row of pomegranates in Minoan bronze-work cf. Markides, *British School Annual* XVIII, 95-7, pl. viii, on the rim of a cauldron in the Cyprus Museum : for pendant pomegranates on a bronze tripod from Ras Shamra, cf. Schaeffer, *Syria* X, 1929, pl. ix. ; Bossert, *The Art of Ancient Crete*, no. 495.

Which Member of the Composite Capitals was uppermost ?

In all the descriptions, the pillars are described first, then the convex " bellies," then the concave " lily-work " ; and this order is not impossible, giving a thistle-like profile (as in the *Enc. Bib.* and Burney, p. 89) for which it is not easy to find archæological parallels, except the profile of cornice-mouldings on Phœnician monuments of all periods. But in

1 K. vii, 19, 20 Vulg. after describing the " lily-work " proceeds *et rursum alia capitella in summitate columnarum desuper, juxta mensuram columnae contra retiacula : malogranatorum autem ducenti ordines erant in circuitu capitelli secundi* (cf. " the other capitals " R.V.). The *ducenti ordines* is an obvious slip for two rows of one hundred, as in M.T., LXX. This version

FIG. 4

Capital from the Treasury of Atreus at Mycenae
(*British Museum*)

sets the *alia capitella* with net-work and pomegranates *above* the lily-work. This alternative is the regular structure of the capitals in Minoan architecture from the sixteenth to the thirteenth century B.C. ; familiar examples are the capitals on the " Lion Gate " and on the façade of the " Treasury of Atreus " at Mycenae. (fig. 4 : Bossert, nos. 10, 19) ; in frescoes at Knossos (Bossert, 234) two such " bellies " are superposed ;

and the intercourse between the Minoan centres in Crete and Cyprus, and the cities of the Syrian coast from Ugarit (Ras Shamra) southward was sufficiently copious to make this the more probable arrangement. Neither Egyptian nor Assyrian architecture offers any close parallel at all.

This Minoan influence is the more noteworthy because, as Macalister explained long ago, the palace of Philistine Gaza was of similar Minoan design, with its portico supported by two pillars between which Samson was exhibited, and from whose slightly raised stone bases it was possible for a very strong man to wrench away the timber shafts by "bowing himself" and pulling them together below. Just such a portico was the *ailam* of Solomon's Temple, with its two great columns between the prolonged side-walls of the main chamber.

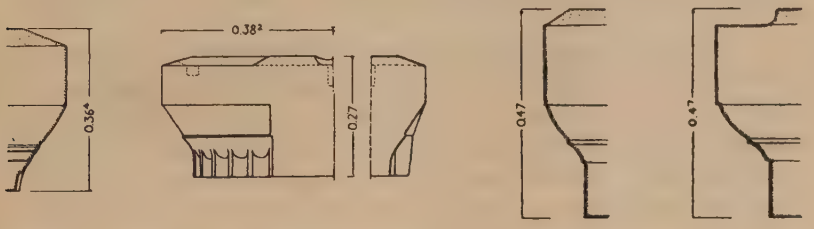


FIG. 5

Profiles of Capitals from Palmyra, after Seyrig

The only archæological parallel is in the inscription of Jehaw-milk of Gebal . . "the portico and its pillars, and the capitals that are upon them, and its roof . . " (*C.I.S.* I, I : Olmstead, *Palestine and Syria*, 615) but it does not contribute in detail, nor even give the number of pillars. The persistence of this convex-concave type of capital, in Syria, is illustrated by two examples of late (though uncertain) date, from the sanctuary of Bel at Palmyra, published by H. Seyrig, *Antiquités Syriennes* 111, 112, figs. 32, 33, 34 (*Syria*, XXI, 1940, 325) and described as "plutôt dorisants que doriques" (fig. 5).

Where did the Two Pillars stand?

This disposition of the two "pillars" will surprise those who have been accustomed to regard them as a pair of independent monuments, like Egyptian obelisks, in front of the façade and unconnected with it.

But the literary evidence is indisputable :—

(1) "And he set up the pillars at the porch of the Temple" (1 K. vii, 21) : LXX, adds "and a beam upon both the pillars" (*kai melathron ep' amphoterōn tōn stulōn*). This is clearly the central member of the architrave of the portico, and as the portico was 30 cubits wide (1. K. vii, 6) like the main chamber, and its architrave carried the façade, some such support was necessary. The lateral members of this architrave are described separately (1. K. vii, 21 LXX).

(2) As the height of the portico is not given (except the "120 cubits" in LXX 2 Chron. iii, 4), it may not be assumed to be the same as the 30 cubits height of the main chamber behind it. But the total height of the two pillars (18 + 5 = 23 cubits) is none too large to provide for the architrave and roof construction : not to mention any steps up from the court-yard to the pavement of the portico, as in Ezek. xl, 49 : where LXX has 10 steps. The 32 cubits of 2 Chron. iii, 15, is in any case excessive, but is perhaps the cause of the misapprehension that the "pillars" stood clear of the building, and may be connected also with the surprising statement of 2 Chron. iii, 4 that the porch was 120 cubits high (about 180 ft. !)

(3) In 1. K. vii, 21 LXX repeats the statement about the architrave (*kai epanōthen tōn pleurōn epithema melathron*) with the significant mention of the "sides" which carried it. These are the lateral walls of the portico—in Greek terminology the *antae*—and each of the beams, which rested at one end upon an *anta*, was carried at the other by one of the "pillars." As the internal width of the Porch was 20 cubits and each of the "pillars" was of 4 cubits diameter, the

intervals between the " pillars " and the side-walls amounted to 12 cubits. If the intercolumnar intervals were equal, they were no wider than the " pillars " ; but the " pillars " may have been set nearer to the side-walls than to each other, giving equal space between the capitals, not the pillars, and a wider central span (Ezek. xl, 49). The great width of the " pillars " would be, however, a serious consideration in favour of the old view that they stood, not " in " the porch, but in front of it, if we had not the express reference to the architraves.[1]

Albright's recent re-statement of the view that the Two Pillars stood free in front of the Portico, and were gigantic incense-burners, overlooks these structural details, and incurs positive objections :—

(1) there is no mention of this purpose for the Pillars, nor of any kind of bowl or container within the capitals.

(2) as the Pillars were about 30 feet high, how were they supplied with fuel and incense ?

(3) at this altitude, the savour of the incense would be dispersed.

(4) with an area of six feet or more in diameter, the consumption of fuel and incense would be enormous.

NOTE.—The façade of Ezekiel's Temple (Ezek. xl, 49) is different. The porch is 20 ft. wide, and has 8 steps (LXX 10 steps), and 2 columns stand " in the façade " (Vulg. *et columnae erant in frontibus*) between wide " shoulders " (LXX *epōmides*) which prolong the side-walls, and narrow the entrance ; but Ezekiel takes no account of the blank end walls of the tiers of chambers on either hand. These " shoulder " walls were decorated with palms (41, 46, *similitudo palmarum hinc atque inde in humeralis vestibuli secundum latera domus latitudinemque parietum*).

[1] Jer. lii, *20-23* would certainly imply the destruction of the portico, if the pillars were under the lintels, unless replaced by other supports. But v. *17* says they were " in the house."

Solomon's Temple and the Temple of Paphos in Cyprus

The popular comparison of Solomon's Temple with the Temple of the Paphian Goddess in Cyprus (Blinkenberg, *Le Temple de Paphos*, 1924) as shown on Roman coins and gems, and the temple in goldfoil from Mycenae (Bossert no. 189) rests on misinterpretations (1) of the side-chambers as subsidiary shrines, open to the façade, (2) of the two towers of the Cyprian façade as the " two pillars." Solomon's Temple was a closely guarded " oracle " with a single sanctuary in rear of its main hall, whereas the cult object at Paphos and at Mycenae was exposed to view under a portico ; and the two tower-like structures are shown by a comparison of representations of different dates to be intended for two pairs of masts, sometimes carrying banners. These indeed may have been sacred objects of a " tree " or " pillar " cult, but they were not architecturally columns ; they had no capitals ; and they stood free of the façade. In some late representations one of them is shown as broken.

Unfortunately all trace of the older temple was destroyed when the Paphian Sanctuary was reconstructed in Ptolemaic times.

The House of the Forest of Lebanon (1 K, vii, *2-6*) was evidently a building of unusual design ; but its construction is obscured by an inconsistency in the description of its columns. Were these in *four* rows (M.T.) or in *three* (LXX Vulg.) ?

If " four " rows of columns are accepted, as in M.T., the total number 45 is a mistaken gloss (the cause of which will be examined later) ; and if the other dimensions are correct, only the side walls were of masonry, and both the long façade and what has been usually regarded as a wall at the back, were open colonnades. You looked right through the four rows of columns, as through a forest, into an open space beyond ; and this was the origin of the name, " House of the Forest of Lebanon " (fig. 6).

If the cedar shafts were 1 cubit in diameter, the inter-columnar space was 5.375 cubits *along* the rows $\frac{100-15}{(16)}$ and less if the diameter was greater ; a very crowded arrangement, even for a " forest."

Now if the 4 rows of columns had been contained within a building 50 cubits from front to back, with walls on *both* its long sides, there would have been 5 aisles, and the inter-columnar spaces *across* the rows would have been $\frac{(50-4)}{5}$ = 9.2 cubits.

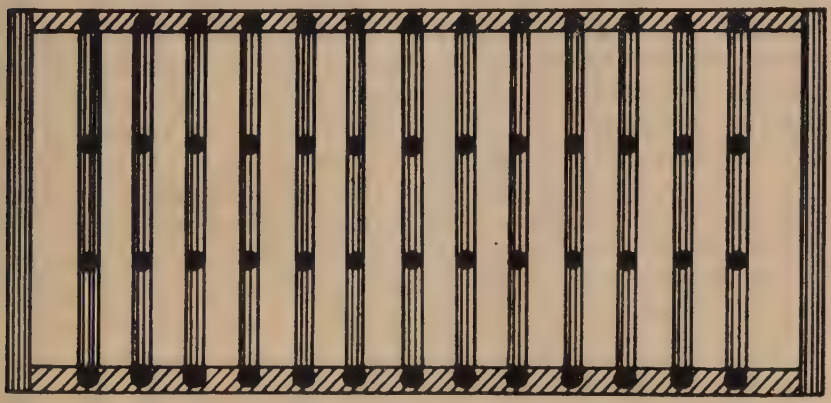


FIG. 6

Plan of the 'House of the Forest of Lebanon.'

But as the cedar beams (" ribs " M.T.) which connected the columns and supported the ceiling were 45 in number, and 15 in a row, like the columns, there were only enough beams to interconnect four rows of columns, without provision for connecting the outer rows of columns with any outside wall

beyond the lateral aisles, either back or front. On these dimensions therefore, and with *four* rows of columns, there was neither front wall nor back wall, but open colonnades, as above, and only 3 aisles, of much greater width $\frac{(50-2)}{3}$ = 16.0 cubits ; a very long span—but not so long as the 20 cubits of the Temple—and about equal to 3 of the longitudinal interspaces along the rows of columns (5.375 above).

With this wide transverse spacing, and no back or front wall to buttress the cedar-beam construction against lateral thrust, no wonder that special mention is made of the " cut beams " or " shoulder-pieces " (*ōmiai* LXX) which connected the roof-beams with the heads of the columns. These bracket-capitals recur in the Royal Palace at Persepolis, the slender columns of which are inherited from timber-work. No such struts were described or required in the longitudinal rows of columns, because here the inter-columnar distance was much less ; all the longitudinal thrust was taken up by the end-walls ; and the transverse beams were tied together by the frames of the coffered ceiling (*ephatnōsen* LXX 7, *3* cf. 6, *9*, *phatnōmasin kai diataxesin kedrois*. Vulg. *laquearibus*).

This coffered ceiling provides a further detail of construction in favour of *four* rows of columns, and no back wall. For as the building was 50 cubits from front to back, if there were *four* aisles (as in Vulg. *quatuor deambulacra inter columnas cedrinas*) the width of an aisle (allowing for columns of 1 cubit diameter) was $\frac{(50-3)}{4}$ = 11.75 cubits. But this dimension does not accord with the longitudinal inter-columnar width of 5.31 cubits, unless the coffers of the ceiling were oblong. On the other hand, if there were only *three* aisles (as there would be between *four* rows of columns) the aisle-width was $\frac{(50-2)}{3}$ = 16 cubits, almost exactly 3 times the coffer length of 5.31 cubits as above ; providing for 3 square coffer-panels across each aisle.

All this reconstruction depends upon the M.T. reading : (*a*) *four* rows of columns ; and (*b*) 45 cedar beams. Stade, however, followed by Burney and others, maintains the *three* rows of columns (45 in all), and assumes a back wall, connected by beams with the columns, to complete the *three* aisles of LXX (*triōn, trissōs*). He has to ignore the *quatuor deambulacra* of Vulg., which could only be achieved either with a back-wall and *four* rows of columns, or by enclosing *three* rows of columns between solid walls both back and front ; (cf. van Gelderen, *Arch. f. Orientforschung* VI. Berlin 1931, 103) and in either event, the 45 beams are insufficient to span four aisles.

The fundamental discrepancy between *four* and *three* rows of columns, and also the absence of reference to a back-wall in M.T., whereas it must be presumed from *triōn* in LXX, can be reconciled, however, by supposing (*a*) that the building had originally *four* rows of columns and no back-wall ; (*b*) that subsequently the back row of columns was built up solid as a back-wall. This would be the most effectual way of strengthening a construction which was bold and unusual from the first, and liable to decay, being essentially in timber. In this way alone can the *three* rows of columns be reconciled with the 45 beams, for these still rested on the back row, though now embedded in the back-wall, and overlooked in the later description preserved in LXX.

The great height of this building (30 cubits) makes it probable (though not necessary) that there was an upper storey ; perhaps more than one. Even if cedar trunks of this length were to be found, their diameter would be more than 1 cubit (assumed above). The bronze columns of the Temple Porch, which, with their capitals, were only 23 cubits high, were 4 cubits in diameter. Also the " doors " in M.T. (*thurōmata* LXX ; omitted, Vulg.), and the " prospects " (A.V., not in LXX or Vulg.) or window-openings, were superfluous in an open colonnade ; and the " rectangular roofed spaces " (*chōrai tetragōnoi memelathrōmenai* LXX) and three " roofs " or ceilings (LXX) must refer to a super-

structure. Driver interprets the " ribs " of 7, 3 in M.T. as partitions, like those of the Temple. With 3 upper storeys, each 6 cubits high, and 2 cubits allowed for floor-structures, there would still be 10 cubits left for the ground-floor " house of the forest," with its inter-columnar space of only 5.31 cubits.

If such upper storey or storeys were divided, their partitions or " ribs " would be carried by the great transverse beams, and by the inner rows of columns, forming three rows of chambers over the aisles. Their " doors opposite doors " would be in the transverse partitions ; and they would require " prospects " or window-openings, in 7, *3*, " frames " ; " light over against light " M.T.[1] ; though the middle row of chambers would have no outside walls. The design of the façade would thus resemble that of the Ducal Palace at Venice, but with 3 rows of windows. Vulg. transfers the phrase which it translates *contra se invicem positas et e regione se respicientes* to emphasize the regular order of the columns, and says nothing about an upper storey in 7, *4*. But the M.T. *meḥezah*, translated " prospects " in A.V., is not clearly rendered in LXX or Vulg. so its meaning is obscure. And there is no description of any mode of ascent, as in the lateral chambers of the Temple.

Among earlier reconstructions, that of C. van Gelderen, *Archiv für Orientforschung*, Berlin V. 1928-29. 101-6 should be noted, because it conjectures a stone wall surrounding the " House of the Forest," which then would be of 5 aisles, but with only 3 ranges of roof beams. The windows he regards as standing in 3 storeys, and he supplied 6 larger windows to the great hall. The " Portico " of v.6 he placed at the end of the " House of the Forest," giving access to it, and making the total length 130 cubits. All this goes far beyond the text.

[1] 1 K. vii, 4. Driver translates the Heb. *pa'am* " series " or " stage " : literally " foot " ; the word is used for a " foot-fall " or " time-beat " and so for any series—" once," " twice," and so forth. It is used for the " foot " of the Ark in Exod. xxv, *12* ; xxxvii, *3*.

THE PORCH OF PILLARS. 1. K. vii, *6*.

This was smaller than the "House of the Forest" (50 cubits by 30 cubits), and of simpler construction. It had, or consisted of, a portico (*ailam*) like that of the Temple; i.e., it had one side open as a colonnade, with pillars supporting the roof. As it was 30 cubits from front to back, it must have had also internal columns. The only other feature is obscure. The M.T. *'ab* recurs in Ezek. xli, *25*, but the meaning is unknown: LXX *pachos*, "thickness," merely describes a dimension: Vulg. *epistylia super columnas*, suggests another Hebrew original, like the "thick beams of wood" of Ezek. xli, *25* R.V. (LXX *spoudaia xula kata prosōpon tou ailam exōthen*), referring to the architrave and cornice of the colonnade: *Pesh.* "entrance-hall," and *Targ.* "threshold," are commentary on the archetype of *pachos*, but there is no separate dimension. Driver suggests as alternatives "cornice," "joist," "landing": the first two are consistent with *epistylia*, the third with "threshold" (*Targ.*). Or there may have been a dais or platform in front of the colonnade; but Vulg. *alteram porticum in facie majoris porticus* seems to describe a separate building.[1]

This "Porch of Pillars" seems to have been merely a deep portico, like the *stoai* so common in Greek cities and sanctuaries. Even in the Mediterranean and Near East there is a rainy season, as well as occasional sharp showers. This was probably the "Solomon's Porch" of New Testament writers.

THE PALACES OF SOLOMON AND OF PHARAOH'S DAUGHTER

Of these buildings no structural details are given. The *Throne Room* had cedar panelling up to the "copings" (LXX *heōs tōn geisōn*: Vulg. *ad summitatem parietum*: for the

[1] 1 K. vii, *6*. Driver notes that the obscure word for "platform" (cf. Ezek. xli, *25*) may be connected with Syr. *'uba*, "bosom," Arab. *gubb*, "depressed land." Haupt on 1 K. vii, *6* suggests *Aufgang*, *Schwelle*, *Vordach*; Weidhaar, *Z. f. Assyr.* 45, 115, indicates a "baldachin" for holding audiences: both would be in front of the Porch itself.

" copings " cf. Targ. *tōn palaistōmaton*, " handbreadths," which describe a cornice or frieze above the panelling.

In the walls of the great courts (K. vi, *36* ; vii, *12*) the timber courses among the ashlar masonry are a precaution against earthquakes, as in Minoan palace architecture.

The " Sea of Brass." 1 K. vii, *23-26*.

Among the larger furniture, the main design of the bronze " Sea," supported by 12 oxen, is undisputed, but there are difficulties in detail. The *funiculus* of 2 Chron. iv, *2* Vulg. is not a cable-moulding, but the 30 cubit measuring-cord used to determine the circumference, as in 1 K, vii, *15* ; it does not appear in LXX ; this measurement is approximate, as the diameter was 10 cubits (v. 25. M.T.). In 1 K. vii, *28* (2 Chron. iv, *5*) the " brim of a cup with flowers of lilies " describes one of the popular " lotus-border " ornaments, curving slightly outwards, as on the capitals of the bronze " pillars " (1 K, vii, *19*, *28*) : LXX gives greater detail (*diageglumena blastous krinou*), 2 Chron. iv, *5* : the plural is sufficient to indicate separate lotus-flowers, another very common ornament : but 1 K. vii, *26* Vulg. is conclusive : *quasi labium calicis et folium repandi lilii*, accurately paraphrasing M.T. (Driver), " made like the rim of a cup, lily-blossom." It is the outward curving profile that is meant.

Of the external ornament of the " Sea " below the rim, M.T. says little : " flowers " or " colocynths "—oval gourd-like objects—" two rows, cast in its casting," identical therefore with what the versions describe in greater detail.[1] LXX gives two versions : (1) 1 K. vii, *24*, *kai huposterigmata hupokatōthen tou cheilous autēs kuklōthen ekukloun autēn*, *deka en pēchei kuklōthen : duo gene hupostērigmatōn kechumenoi en tē chusei autēs hestōtes* seems to elaborate v. 23, *kai sunēgmenoi treis kai triakonta en pēchei ekukloun autēn kuklō ;* but *deka en*

[1] 1 K. vii, *24*. Driver translates " colocynths " : Heb. *peqa'im ;* Syr. *pqi'e*, " flowers bursting open " from *pqa' :* cf. Heb. *paqqu'oth*, Syr. *paqu'a*, " colocynth fruit " : Ass. *piqqu*, " gourd " *Cucumeris prophetarum*, Linn. (Low, *Aram. Pflanzennamen* 323-4.

pēchei cannot mean "ten to a cubit" (as R.V.), for the items would then be only $1\frac{1}{2}$ inches long: it is probably a mistake for *treis kai triakonta en pachei* (surely *pēchei ?*) in v. 23, and is another approximation to the circumference of the "Sea." The gender of *kechumenoi* refers to some lost substantive (*kolokunthoi, boës ?*); the *duo gene* are the two friezes of ornament; *hupostērigmata* suggests the small bracket handles supporting the rim of a vessel, which are frequent in Oriental and Minoan art. But Vulg. v. 24, *sculptura subter labium . . . duo ordines sculpturarum striatarum erant fusiles*—whatever may be the meaning of *striatarum*—points rather to the alternative version in LXX below.

(2) In 2 Chron. iv, *2, 3, homoiōma moschōn . . . kuklō kuklousin autēn . . . duo gene echōneusan tous moschous en tē chōneusei autēs*: Vulg. *similitudo boum . . . quaedam extrinsecus caelaturae quasi duobus versibus alvum maris circuibant . . . fusiles.* Compare the processions of charging bulls in relief, on the rim of a cauldron of Minoan workmanship from Cyprus (*Hdbk. Cesnola Collection, Met. Mus. of Art.* New York. no. 4703), and on the tripod rim (no. 4704), both cast in the solid, as here. The two zones of processional animals cannot have been more than half a cubit high, and were probably less. At half a cubit, each of the oxen would be about a cubit in length, and therefore 30-33 in number: perhaps the original of 2 Chron. separated the *number* of the oxen (33) from their size (*en pēchei*). Such external zones of frieze ornament are common also in oriental bronze-work of the eighth-sixth century, imported into the rich Etruscan and Italic tombs of middle Italy, but these later friezes are engraved or embossed, not cast solid like the Minoan prototypes, which are of the 14th-13th centuries.

No large-scale lavers of this kind have been preserved in metal. But on the acropolis of Amathus in Cyprus stood a much larger bowl of limestone, of which the three handles are supported by each by a bull: it is now in the Louvre. And the type persisted in Cyprus, in limestone miniatures where the bowl is supported by a single outward-facing

sphinx, or a votive woman, or a deity. (*Hdbk. Ces. Coll.* nos. 1087-9, 1141 ; Myres, *British School Annual*, XLI, pl. 17, *421*. Ohnefalsch-Richter, *Kypros, the Bible, and Homer*, pl. cii, 1, winged-figure, cxxxiv, i. 2, cxlvii, 2, female figure, cxlvii, 5, sphinx).

The Ten Smaller Lavers : 1 K. vii, *27-38*.

Most complicated of all is the description of the ten bases of the smaller "lavers," 1 K. vii, *27-38*, where 2 Chron. iv, *6* only mentions the lavers, without describing them, but Vulg. has some interesting paraphrases.

Each of these bases (M.T. *meḥanōth*, LXX *mechōnōth*) was 4 cubits long by 4 broad : LXX gives 5 cubits length, giving room for a celebrant to stand by the laver ; but possibly the length has been confused with the over-all height. The height "3 cubits" (M.T.) is probably correct : LXX "6 cubits" is excessive, even for over-all height of base and laver ; for the lavers were intended to be filled with water, and used for washings and sprinklings, and must therefore have been within reach of the celebrant.

The structure of the bases was imitated from framed woodwork, with "uprights" and "enclosing frames" between them (*exechomena : plectae : juncturae*), decorated with zones or panels (*synkleismata : coronulae* (29) : *tabulata* (36)) ; filled with lions, oxen and cherubs.[1] "On the uprights and above and beneath" the panels, i.e., on the transverse framing, was "bevelled work" (= mouldings). Of these panels there seems to have been more than one tier, with framing below (*kai epi tōn exechomenōn houtō kai epanōthen : et in juncturis similiter desuper* (29)). The word *synkleiston : interrasile* (28). (Pesh. "ledges" M.T. *shelabbim*) means literally "mortised" like the rungs of a ladder. Below the panels were "spaces" (*chōrai, ergon katabaseōs : lora ex aere dependentia*).

[1] 1 K. vii, *28, 29*. Driver translates *shelabbim*, "uprights" : the verb is *shullab*, "was joined together," Exod. xxvi, 7 : cf. Mishnaic Heb. *shelibah*, "rung of a ladder" : cf. Syr. *shalba*, "narrow mountain-path." The *shelabbim* are vertical "joints" to which the "enclosers" (= frames) are joined.

The word *chōra* is used for the zones of ornament on the " Chest of Cypselus " at Olympia (Pausanias V, xvii, 2), and *katabasis* (29) meaning " descent " suggests a plinth in broad descending steps. But *lora*, " straps," might be used for narrow " zones " or frame-work between panels, with recessed or bevelled margins.

Each base was carried on 4 wheels (30, 32) running on projecting brackets (M.T. " shoulder-pieces " ; A.V. " under-setters " ; LXX. *ōmiai ;* Vulg. *humeruli*) which carried their stub-axles (" hands " : *cheires : axes*). The words which follow in LXX. *apo peran andros proskeimenai :* Vulg. *quasi in similitudinem hominis invicem respectantes*, may refer to the design of these brackets, which were cast solid on the sides or corners of the base.

The wheels are described again in more detail (32-34). Their axles (*cheires, axes*) were below (or " at the foot of ") the frame-work of the base (31, 32. *diapēga*, curiously rendered *media intercolumnia*, but the word means " cross-bars," and these members may be the *ōmiai* of v. 30. The height, i.e., diameter, of the wheels was $1\frac{1}{2}$ cubit (33), and their construction was that of chariot-wheels, with naves (*auchenes : modioli*) turning on axles (*cheires : axes*), spokes (*radii*, omitted by LXX), and rims (*nōtoi : canthi*) : the order varies in LXX and Vulg., *nōtoi* is rendered " nave " by L & S, without reason except the order of the words, which would equate *nōtoi* needlessly with *modioli.*

The four projections at the four corners of the base (*ek tēs mechōnōth hoi ōmoi autēs : et ipsa basi fusiles et conjuncti erant ;* v. 34) were part of it ; restating v. 30.

In v. 31, repeated with amplification in vv. 35, 36, is described a superstructure which actually upheld the laver-bowl. On the top of the square base (*epi tēs kephalēs tēs mechōnōth : in summitate basis*) was a circular collar, half a cubit high (*hēmisu tou pēcheōs megethos, strongulon : rotunditas dimidii cubiti*, 35) enclosing a " mouth " (*stoma strongulon : os intrinsecus in capitis summitate*, 31) which being $1\frac{1}{2}$ cubits wide, and 1 cubit high (*anōthen en pēchei : unius cubiti erat totum rotundum*, 31) made a suitable support, circular—" the workmanship

of a pedestal" D. This contained the round bottom of the laver-bowl of which the greatest diameter was 3 cubits. The discrepancy as to the smaller dimension of this collar is not serious from the point of view of design, except as defining the decoration. For "on the mouth of it" (*epi stomatos autou ;* but Vulg. *in angulis columnarum*) were "carvings" (*diatoreumata : variae caelaturae*), and "enclosing frames" (*diapēga : media intercolumnia*, 31) which were "square, not round" (M.T. 31). Both the Greek words are technical terms : *diatoreumata*, "embossed through the thickness of the metal," as many ancient reliefs were ; and *diapēga*, literally, "cross-bars," meaning some kind of framework. The insistence that these were "foursquare, not round" evidently contrasts this part of the superstructure with the round "mouth" or collar in the centre ; and as the *diapēga* in v. 32 are above the wheels and their axles, it looks as if they were continued (as in v. 29) on the angles and sides of the rectangular base : in v. 35, the "beginning of the axles" (*archē cheirōn*) is connected with the panels (*synkleismata*) on the sides of the base, in which case the *diapēga* are part of the same framework as the *exechomena* (*juncturae*) of v. 29. This upper framework with its relief-panels thus formed a border or frame on the upper surface of the base, enclosing the round "mouth" : and consequently the backs of the *synkleismata* could be seen to be embossed from behind (*diatoreumata*) as described. In what sense this decoration "was opened upon the beginnings of its axles" (*ēnoigeto epi tās archās tōn cheirōn autēs :* Vulg. follows a different text) is not clear.

It must be noted that between the foursquare upper surface of the base, and the circular "mouth" in its centre, there were four roughly triangular spaces, which needed to be closed somehow ; and this very obscure paragraph may be an attempt to describe how this was done, by embossed and perforated plates.

The list of subjects in these panels (36) substitutes "palms" for "oxen," and is followed by an obscure phrase (*echomenon*

hekaston kata prosōpon autou esō kai ta kuklōthen : quasi in similitudinem hominis stantis, ut non caelata sed apposita per circuitum viderentur) : the comparison with a "standing man" is an echo of LXX (30) *apo peran andros proskeimenai* of the angle pieces which carried the wheel-axles ; these were angle-figures "each projecting towards his face," i.e., looking outwards, in such high relief that they seemed affixed, not cut in the solid, and were visible from both faces of the base (*kuklōthen : per circuitum*). The meaning of *esō* is obscure, unless the figures projected so far that their backs could be seen.

Such rectangular bases, with panels in frames, and wheels below, are preserved in bronze-work of this and subsequent periods, and seem to have served as moveable supports for large bowls :—

(1) From Larnaca, Furtwangler, *Sitzber. K. Bayr. Akad. Wiss.* (*phil-hist. Classe.*) Munich. 1899. Vol. 2, heft 3 ; wheels on axles which traverse the 4 feet ; brackets between feet and rectangular body framed, with sphinxes in panels : circular bowl-socket with spiral ornament : reproduced Burney, p. 91, fig. 1.

(2) From Enkomi : *Brit. Mus. Excav. in Cyprus*, p. 10, fig. 18, reproduced Burney, p. 92, fig. 2 : feet broken, but brackets preserved ; rectangular body with spiral ornament on frame, and human heads in panels : circular bowl-socket with spiral ornament as in (1).

(3) From Enkomi : *Brit. Mus. Excav. in Cyprus*, p. 10 fig. 24A ; oblong like a wagon, on 2 pairs of wheels.

(4) From Enkomi : fragment with pair of wheels and axle on bracket : *l.c.* p. 10, fig. 25 (1460 : another wheel 1456).

In the summary, 1 K. vii, *37*, the odd term *taxis mia* is shown by Vulg. *fusura una* to be a mistake for *tēxis mia*, "a single casting."

OFFICIALS OF THE CULT AT UGARIT

By D. M. L. Urie

The purpose of this article is to give an account of the cult officials mentioned in the Ras Shamra texts.

The uniformity in the culture pattern of the Ancient East which recent study has disclosed leads us to expect that the chief cult official will be the divine king. Ivan Engnell in his *Studies in Divine Kingship in the Ancient Near East* (1943) argues that all the Ugaritian texts (including the *Dnl* and the *Krt* texts) are cultic myths concerned with one or other of the various rites centring round the divine king. Whether this interpretation be true or not, definite reference to the ritual role of the king is provided by the short texts published in 1929. (cf. T. H. Gaster O.L.Z. 1938, col. 475).

In text 3 we have at line 50 the words *dbḥ mlk lprgl* " The sacrifice of the king to *Prgl*." At line 53 we read *yrd mlk ṣbu* " The king sacrifices a gazelle."

Tablet 5 which contains many words of uncertain meaning is composed of three paragraphs. The first and third clearly give an account of a ritual in which the king takes part.

In tablet 9, which contains a list of sacrificial offerings, the words *mlk brr* " the king purifies," occur at line 10.

The short text published in Syria XIV p. 231 refers at line 4 to *šr mlk ś 'm*, " the ox of the king, the lamb of the people."

These passages, though few in number, make it clear that at Ugarit the king exercised distinctively priestly functions. Whether the king was regarded as actually a divine being or whether the concept of his divinity was simply a liturgical convention cannot be determined, for as Engnell remarks " it is always impossible to draw the line between the two." (ib. p. 173).

Next to the king the chief cult official seems to have been the *khn*. The order of *khnm* was presided over by an official called the *rb khnm*. The library in which the texts were found, situated between the temples of Baal and Dagon, seems to have been the residence of the *rb khnm* (Schaeffer, *The Cuneiform Texts of Ras Shamra—Ugarit* p. 34). The name of one of the chief priests has come down to us *Atn Prln* (I AB 6 : 54).

The *khn* was probably the highest order of official apart from the king. The large dwelling of the *rb khnm* shows that he must have occupied a position of consequence in the community. The *khn* is not included among the various officials mentioned in the short 1929 texts and from this we may conclude that he played little part in the general routine of the cult. He was probably a state priest, a political personage who was concerned chiefly with the great seasonal rituals enacted to secure the welfare of the community.

The feminine form of *khn* does not occur at Ugarit and in this Ugaritian agrees with Hebrew as against Phoenician. That women however occupied a definite place in the cult at Ugarit is certain. I D 172 refers to a class of women known as *bkyt* and *mśspdt*, " the women who weep " and " the women who mourn." The shafel form of the latter term points to the probability that these were professional mourners the shafel frequently being employed in a cultic significance. Another female attached to the cult was the *b'lt bhtm*, " mistress of the temple " (1929, 1:21 ; 3:37 ; 9:10 ; 19:4). We may hazard the conjecture that the *b'lt bhtm* was the female sacred prostitute (Heb. *qedēšah*). In tablet R S 8252 (Syria XVIII p. 163) which contains a list of cult officials occurs the word *enśt*, " women." These may also be sacred prostitutes.

Male sacred prostitutes occur under two names at Ugarit—*qdśm* and *klb*. The former term corresponds to Heb. *qedēšim* and has not been found in any other Canaanite dialect. At Ugarit it occurs twice (Syria XV p. 243 ; XVIII p. 150).

The *klb* is referred to at 1929, 3-52 and I D 10. Ritual prostitutes are so designated in Hebrew and Phoenician. (cf. Deut. 23:19 ; CIS 186 B 10).

As regards the functions of the priests the texts afford little direct evidence, but an outline of their duties can readily be supplied.

A major part of their duties must have been concerned with the offering of sacrifices. Sacrifice occupied an important place in the cult at Ugarit, and even if the offering of sacrifice was not restricted to the priesthood (a point on which there is no evidence), this must have been a prominent priestly function.

Of equal importance among the ancients was the practice of divination. The Ugaritian texts give evidence of at least three methods of divination and this rite also must have fallen to a great extent on the priesthood.

(1) By means of vases. These were broken and the manner of their breaking was indicative of the future. (I D 4, 14).

(2) By watching the flight of birds. (I D 28-37 ; III D 1:19-34).

(3) Hepatoscopy. (I D 105-150).

Another function almost certainly exercised by the priests at Ugarit was that of teaching. As guardians of the cult one of their duties must have been to impart a knowledge of its mysteries to the younger officials. That such a school of sacred learning existed is proved by the colophon appended to poem I AB which preserves the name of one of the pupils of the chief priest—*Elmlk lmd Atn Prln rb khnm*, " Elmlk pupil of Atn Prln chief of the priests."

Another official was the scribe—*spr*. That the scribes were an organised body is proved by a fragment of a text (R S 6174) published by Virolleaud in Syria XVI (p. 184), where reference is made to *rb spr Hbb*, " Hbb the chief

scribe ". Their task probably was to compile the liturgical texts and to their labours are no doubt due the existing tablets. Text 1929: 16 is perhaps a writing exercise performed by one of the *sprm*.

An important priestly activity in ancient times depended on the belief that physical illness might be cured by appropriate spells and incantations. The large part played in the Babylonian cult by the *ašipu* priest is well known. There can be no doubt that the priests at Ugarit exercised similar functions and one of their ritual prescriptions may be preserved in the text published in Syria XV pp. 75 ff. (*Fragment d'un traité phénicien de thérapeutique hippologique*).

The Ugaritian priesthood, like all priesthoods, undoubtedly subsisted on the offerings of the worshippers, but the texts contain no certain information as to the manner in which their maintenance was provided. It is true we hear of " two birds for the man of god " (1929, 1:20), " a large animal for the lady of the temple " (1929, 1:21), but these were not necessarily presents for the support of the cult officials. They may have formed the material for the official's offering.

The conception of religious uncleanness and rites deriving from it presumably formed part of the religion of the Ugaritians, and in this connection many duties would devolve on the priests. We have already noticed that one of the functions of the king was to offer purificatory sacrifices. A purification ritual is also undoubtedly described at K 62-79.

In addition to these officials the following have also been noted :

enś elm 1929, 1:22 ; 3:27 ; 9:8. " Man of the gods ". cf. Heb. 'iš ha'elohim (Deut. 33:1 etc.) and Phoen. 'iš elm (Harris—A grammar of the Phoenician Language p. 79). Virolleaud suggests (Syria XII p. 73) that he was not a priest but merely a layman attached to a particular temple or god.

bn dbḥm Syria XVI p. 184. " Son of the sacrificers ". A class of officials termed *zbḥm* is referred to in an inscription from Kitium circ. IV cent. B.C. (N S I 20 A : 8).

bn šlḫnm V A B, B: 30. Servants of the temple who had charge of the tables or perhaps of the altars.

ḫrš bhtm R S 8183 and 8201 (Syria XVIII p. 164). " Artisan of the sanctuary." This official is mentioned along with the *khnm* and *qdšm* and must therefore have been a regular member of the temple staff. Officials termed *ḫršm* are mentioned in N S I 20 A: 13. They were probably stone masons.

kmr I D 7, 10, 12. B. Gray shows (*Sacrifice in the Old Testament* p. 183) that *kmr* was the original term in Aramaic for a priest. His conclusion that *kmr* might also be native to Canaanite would seem to be justified by the appearance of the root in Ugaritian. In Hebrew the term is limited to priests other than those of Jahweh. No information is given as to its usage in Ugaritian.

msśu qṭr II D 1:28, " He who sends out the incense."

msk šlš R S 8183 & 8201 (Syria XVIII p. 165). " Libation pourer of the third class " ? (Virolleaud). T. H. Gaster suggests (Syria XIX p. 98) after referring to Isaiah 40:19 and 44:10 where the words *nsk* and *ḫrš* occur together that *nsk* should be translated " metal smelter." For *nsk* in this sense he points to C I S I, 67:4, 327:4, 5. The Ugaritian tablets in which *nsk* and *ḫrš* occur obviously form a group. The terms are also found together at N S I 52:6, 7. At II AB C 13 however the root *nsk* definitely means " to pour a libation ". In Ugaritian as in Hebrew the root may contain both meanings.

nqdm I AB 6:55 *rb nqdm* " chief of the shepherds " ? cf. Heb *nōqēd* applied to Mesha king of Moab (2 Kings 3:4) and to Amos (Amos 1:1). At Ugarit the *nqd* was obviously a cult official. *Atn Prln* was chief both of the *khnm* and the *nqdm*. The *nqdm* may have ranked in importance next to the *khnm*.

rb bt II AB 1:44. " Master of the temple." Possibly the chief sacristan.

r'y Syria XIX p. 341. (*Fragments Alphabétiques Divers de Ras Shamra* No. V). *lreś r'y yślm* "to the chief shepherd greetings." Obviously a cult official. In the Accadian literature the term *re'u* (shepherd) is a common royal and divine epithet. (cf. Engnell op. cit. pp. 86 f.).

śey III D 1:23, 35. Parallel to *śḫṭ* and must therefore mean "sacrificer". cf. Arab. *swy* "to roast" and Syriac *sula* "holocaust." May have been the official who offered the holocaust.

śḫṭ III D 1: 23, 35. "Sacrificer." Heb. *šḥṭ* is frequently used in a sacrificial context.

š²mr ašr II D 1:29 ; 2:17. "Keeper of the sanctuary"? Probably a sacristan.

śrm R S 8183 and 8201 (Syria XVIII p. 158). "Singers"? (Heb. šarim) or "princes"? (Heb. sarim). If the latter, may we have here the origin of the *sar* of Ezekiel and the Priestly literature of the Old Testament?

š'y I AB 6:56 ; II AB 8 : 48. Obviously a cult official. The root occurs at 1929, 2:15 where it clearly means "to sacrifice." The *š'y* was therefore an official who offered sacrifices. It is compared by Montgomery and Harris to a South Arabian root. (Memoirs of the American Philosophical Society IV 1935 p. 129).

THE ROUTE OF THE EXODUS

THE FIRST STAGE. RAMSES TO ETHAM

By L. W. B. Rees

The Children of Israel, led by Moses, comprised the shepherds of the land of Goshen, the mechanics who were building the store cities, and (by tradition) the riff-raff of Egypt. From the root meaning of the words, there is no necessity to think that the riff-raff were present in any numbers, those words meaning simply "the humbled ones of Egypt," and could be merely a reference to the Israelites themselves. However, no doubt, there were, as is usual, many discontented people in Egypt who threw in their lot with the Israelites.

On account of these several groups, at least three stories of the Exodus are related in the Bible. Separate paragraphs from each story are taken from their contexts and, as the compilers of the text never saw the country about which they wrote, the texts are strung together in a very confusing order. The confusion appears in its worst state in a recent translation where the "p" of the authorised version is omitted and there is no indication at all as to when the story changes. In this translation, the story is simply nonsense; although "not one jot nor one tittle" of the original has been touched.

I have endeavoured to sort out the several paragraphs, having flown very many hours over the whole area ; and where passages appear contradictory, I have looked upon them as complementary and as both being correct.

The stories are very true to type. Some wanted to go on and some wanted to go back. Some, just as we do to-day,

wanted miracles, and some wanted to take a more matter-of-fact view of the situation. And just as we find to-day, the mass were quite indifferent as to what was happening, whilst the governing minority completely failed to agree amongst themselves. The stories are so true to type, that they must be judged correct for that reason if for no other.

When a large body moves in the desert, it covers a vast area of country ; so when a particular spot is mentioned that spot can only be where the speaker was at the time, or where the headquarters might have been. These places would also carry different names, because different incidents would happen to different people at the same place. The extraordinary thing about the place names is—that the root meaning of the word itself gives rise to the various stories about that place.

I have flown over a small section of the Rowalla when they have been making their annual migration between Syria and Arabia. On one occasion they covered an area some 30 miles long by 6 broad. The march was led by the sheikh travelling in one of his two motor cars ; and immediately behind him came his mares, seluki dogs and hawks. The whole of the area was so dotted with camels, each 20 being under its own camelherd, that it would have been difficult to have picked out a clear space on which to make a forced landing. By count and estimate there were 17,000 camels.

On another occasion in Kedemoth, near where Moses watered before he attacked Sihon of the Amorites, I was living at a rain-water lake in the desert. For one week the camels passed or came to drink at the lake ; and they drank it dry. For that one week the country was " full of camels " as the bible text relates.

The first stage of the march is fairly clear. There were, at the time, apparently only two roads out of Egypt. The more northern was the coast road, the Road of the Philistines ; which ran from Sin, the Marsh which was the Strength of Egypt, up to Gaza and the north. This was the

road that Moses did not use. The other road was Abraham's road, which ran from Sin (between Elim and Sinai), the Marsh which was the Strength of Egypt, to Beersheba. One notices that the descriptions of the road are almost the same, the words (betwen Elim and Sinai) being inserted to make the matter clear ; and at the time it would have been quite clear which road was meant.

At the time of the Exodus, the lakes formed an " L " from Suez towards Cairo ; so that when the Israelites had reached Pithom, they had no choice but to follow the line of what is now the " Sweet Water Canal."

So we find that the stages were Ramses, the Booths and Etham, the Wall of Egypt. In this wall was a gate ; and passage from Egypt into the desert could be controlled.

According to the permit, the gates were opened ; and the Israelites were allowed to pass out through (? the Ploughman's Gate) on to the flats of Etham.

For some unexplained reason even high authorities seem to think that here the Israelites were bewildered, *i.e.* lost in the desert ; but there is absolutely no basis for that idea, no matter how the passage in the text might be translated. They were on the high road into Palestine which was well known to everybody.

The wording of the text is, The Pharaoh said of the children of Israel—" I have got them caught in the land (of Egypt), balled up and bewildered. The desert is closed to them." The Israelites were certainly bewildered, because they did not know how they were going to get out into the desert.

The words show that Pharaoh had some place, not on the Philistine Road, over which he had control. Now the country between Lake Timsah and the coast was natural marsh, and except for the gates, Pharaoh had no control over this area. To the south, the Great Bitter Lake was too deep to allow Pharaoh to get control. And so we find that Pharaoh must have had control of the little bit between the

Great Bitter Lake and Lake Timsah. The only thing outside the gates that he could possibly control was Seti I's canal. Most canals have lock gates ; and Seti's would almost certainly have had such gates to control the level during the periods of Nile Flood.

Whatever might have been the actual means of control, it was here that the Israelites found themselves caught. The area to-day is bounded by the Suez canal on the east and the railway on the west. The area is eight miles by two, almost exactly 10,000 acres. That area makes one think of the Egyptian tradition. When the shepherds left Egypt they made a stand at Avaris. The story is very confused. It seems that the shepherds built a wall when they were attacked and enclosed an area of 10,000 acres east of Bilbeis.

The traditional site of the stand of the shepherds might be the area indicated, which is 10,000 acres almost due east of Bilbeis.

The tradition goes on to say, that the shepherds put up such a good fight that Pharaoh compounded with them and allowed them to leave Egypt without molestation. They left Egypt and journeyed to Syria.

The bible story is, that the attacking force was "swept away" ; and the name Avaris is suggestive, "averro" meaning to sweep away. The name might also have some connection with ἀνερύω, to draw back, *i.e.*, to draw back the head when making a sacrifice, the ἐρύω meaning to carry off violently. So the name confirms the bible story and indicates that there was also some religious association.

Let us suppose that when Pharaoh gave Moses leave to depart he had in mind this area, and let us see what happened.

On the day after the passover the Israelites left Ramses, the centre of the grazing and a city that was being built by them under conditions of forced labour. They borrowed what they could from the Egyptians, tied their kneading troughs on their backs, took their spears and left Egypt

" with a high hand." The latter expression is meaningless, and they would seem to have had their hands full of arms and gear. One wonders where they got the spare hand. The words are volcanic words, and the basic meaning of the expression is—" they left Egypt in the hand of him who shoots forth," and it refers to the hand of God. When Moses spoke to the Israelites later on in the Exodus, he spoke of the incident and referred to God, who had carried them out of Egypt in his arms, as a man carries his son.

THE REED SEA CROSSING

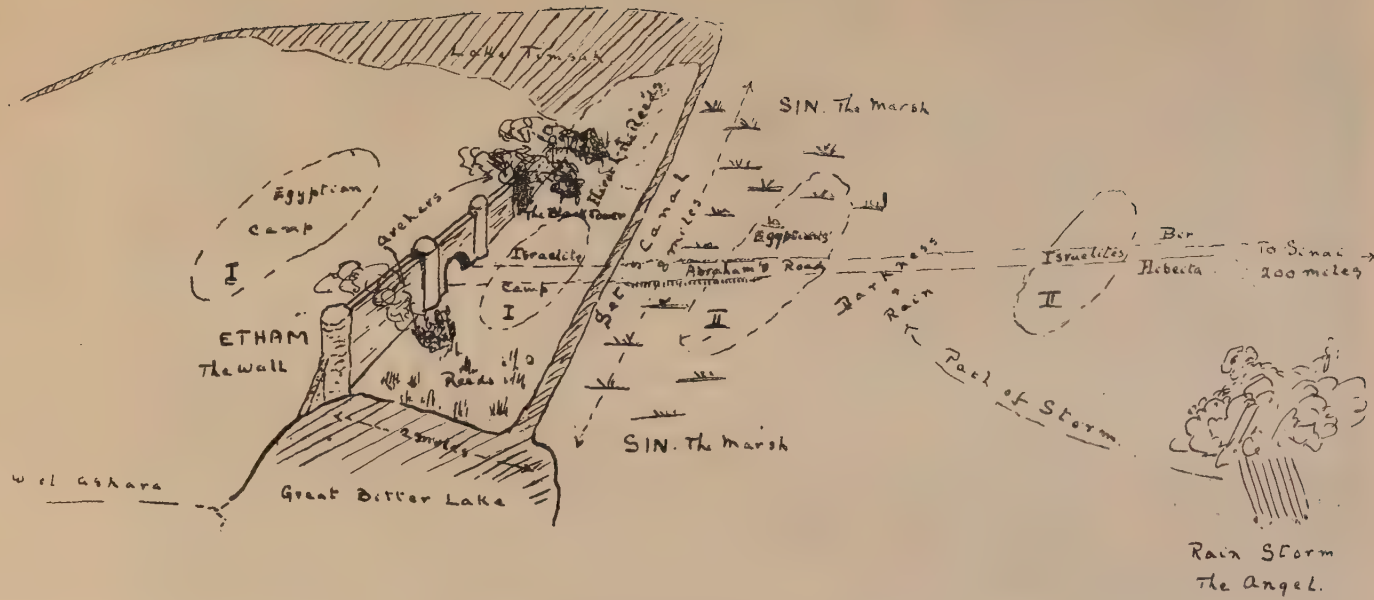
Here were the Israelites, camped east of the Black Tower and east of the Reeds. That word Reeds also means Bewilderment, and would be the reason for the confusion in visualising the situation.

Suddenly the Israelites saw coming after them from Egypt, a force of chariots and horsemen. They realised at once that they would have to face a " treacherous attack." They turned towards the Reed Sea ; and as Pharaoh had not ordered the lowering of the water, they found that they were caught. This was the trick Pharaoh had already contrived.

Moses was much too fine a man to get caught like this for long. He looked towards heaven, and suddenly saw (one might say) the writing in the sky. He ordered his people to stand firm ; and remembering that every man carried an intrenching tool, he immediately gave the order to dig in.

For the moment the matter was a stalemate ; and so it remained for the three days that they were " Perishing in the desert."

At the back of this episode is the idea of fire ; so we may suppose that the Egyptians brought up their Flammenwerfen and set the reeds alight. It was a most uncomfortable situation, and the fire would account for the blackness on the tower. Flammenwerfen are no new thing. The words —flaming arrows—occur again and again in the text. Samson



DIAGRAM—THE CROSSING OF THE REED SEA

CAMP I. SITUATION AT 18.00 HRS., 20 APRIL. WIND—STRONG EAST
„ II. „ „ 06.00 „ 21 „ „ „ WEST

did even better. He put lighted torches between foxes, which he had tied tail to tail ; and got better results than anything we get to-day.

Unfortunately, as is often the case, frightfulness went against the doers ; and as an east wind began to blow, the smoke simply made a smokescreen between Moses and the Egyptians.

The "writing" that Moses saw in the sky was this Advisory Storm Warning.—"An intense tropical disturbance of small area is moving north west by north from the Hejaz. East winds of hurricane velocity near centre. Centre of disturbance should reach Seti's canal at midnight to-night (evening of the third day). Forecast for to-morrow—a strong west wind, decreasing. Visibility good."

Do you laugh at the wording of the warning? Please don't. There must have been high cirrus streaming over the Israelite camp from the direction of Edom. Any young pilot could have made a reasonably accurate forecast. The only difference is, that Moses was so sure of what was coming that he took action. Having dug himself in, he waited.

At 18.00 hrs. on the 20th April, the situation was this : Moses and the Israelites were caught between the wall and the canal, with a strong east wind blowing, which was increasing in velocity. Under cover of the smoke screen put down by the Egyptians, they formed their order of march and waited.

Early in the night the centre of the depression approached, and, as is normal in such circumstances, there was a heavy downpour of rain. The text reads as though there might have been two downpours which joined up between the Israelites and the Egyptians, adding still further to the darkness between the two forces.

The wind was so strong, that the water was blown off the marshes, with the result that the flow from Seti's canal was dammed up ; and both the canal and the surrounding marsh became dry land. The drop in water level need not have been more than 6 feet, or possibly 4 feet.

Moses immediately seized his opportunity. He ordered a general advance ; and in the general bad weather conditions all the people crossed over the canal, through the marsh and on to dry ground in perfect safety.

There are two stories of the downpour and by combining them we read that the heavy rain rushed like a tempest (it was a tempest) and stood between the opposing camps. There was the cloud and there was the darkness ; and the water of the cloud (or the darkness) was a protection on the right and on the left of the Israelites. Because of the rain and darkness the opposing forces did not approach each other all night.

It is most important to notice that there is no suggestion that the sea formed a wall on each side of the Israelites. The safety of the Israelites depended on the rain and darkness. In after days, when Moses was speaking to the Israelites, when referring to the episode he said merely, " We journeyed from the east of the Reeds and passed through the middle of the sea on to the flats." Apparently Moses saw nothing extraordinary in the passage ; in fact, it was quite normal.

In the early morning the Egyptians realised that the Israelites had got away, and they made after them. A little earlier there had been a crust on the marsh strong enough to bear the weight of the Israelites and their cattle. When the Egyptians tried to follow an hour or so later (remember that the rain had gone between the two forces) the rain had softened the crust, so that the wheels of the chariots were bogged down in the mud. When armoured cars meet such conditions they start to founder by the head, just like ships. It is an extraordinary sight to see them disappearing in what looks like solid desert.

During all this time the Eternal had been lighting up the night. Away to the eastward he made a very good guiding light ; but owing to the darkness and the rain, the Egyptians could not see him.

In all tropical despressions there is in the centre an area of calm with good visibility. This area passed over the canal in the watch before the dawn. Suddenly the wind

fell. Suddenly the Egyptians saw the Eternal shoot right up into the sky (as Moses knew he would). They were terrified. They turned to fly towards home. Too late.

As is quite normal under such conditions, immediately after the calm the wind started to blow with hurricane velocity in exactly the opposite direction. Now the trick that Pharaoh had played on the Israelites rebounded to his own discomforture. The pent up waters of the canal rushed back and the waters of the marsh not only rose to normal, but actually formed a wall of water as they returned. Here we have the tradition of the walls of sea water through which the Israelites passed. The Israelites did *not* pass between the walls of water. It was the wall of water that overwhelmed the Egyptians.

It is to be noticed that the water was much higher than normal ; so that the horsemen could not get away like General Hawkwood's army in the marshes of the Po (in the 1500's), when a somewhat similar trick was tried on them. And also that the Egyptians were drowned on dry land.

In the morning the Israelites found the bodies of the Egyptians on the sea shore. An armed man when he drowns, even in the hottest weather, stays on the bottom for at least 6 hours. On this occasion the drowned men were on the shore only an hour or two after the catastrophe ; therefore they must have been drowned on the shore where they were found.

All this is perfectly normal, and in order to confirm the story it might be of interest to relate what happens to-day in similar circumstances. In the Bahamas the sponge boats, some of which are schooners, work on the bank west of Andros Island. Just before the hurricane of A.D. 1899, they had gone for shelter under the lee of the land, and were anchored in from one to two fathoms of water. For three days the hurricane blew, and the sea was driven right off the bank as far as could be seen. All the ships were lying over on their sides on the sea bottom, some of the crews actually managed to light fires on the sea bed and thus cook their meals.

Suddenly the wind changed. The survivors relate how they heard a noise like the firing of big guns and they saw the sea returning in a wall some 20 feet high. Most of the ships were lying broadside on to the wall of water, and they were simply rolled over and over and wrecked. The sea carried some of them several miles into the pine barrens ; and one ship had broken the pine trees at a height of 18 feet above where she was found lying on the ground wrecked.

As the Eternal was seen by the Egyptians it is possible to work out his minimum height and the velocity with which he started to move. We know the approximate distance between the Suez Canal and Jebel Nar, which is about 6,000 feet above sea level. Therefore allowing for curvature and refraction as near as is possible it can be seen that the Eternal showed himself some 25,000 feet above the earth's surface ; and he must have been some 18,000 feet high. The velocity with which he started to move must have been not less than 1,200 feet per second. Both figures are well within the limits of probability of a volcanic eruption.

Even at such a height he would have been obscured by any low hills near the canal. And we find that the only place on the Canal from which the Eternal could be seen is the little length between the two lakes. If a line is drawn on the map from Jebel Nar to the Lakes and pivoted ; it fouls the little hills on each side almost as soon as it is moved.

Therefore the only possible place for the Israelites to cross the canal is also the most probable and it is the water east of the Reeds between the Great Bitter Lake and Lake Timsah.

It is not necessary to suppose that the stand of the Israelites took place exactly in the area bounded to-day between the Suez Canal and the railway, but it must have been very near it.

An additional confirmation is given by the names of two sites. The W. el Ashira runs into the north end of the Great Bitter Lake. Arab. *ashara* means Sign ; and I like to think it is named after the Sign that the Eternal gave and which threw the Egyptians into confusion.

On the east of the Canal is Bir Hibeita, which means defeat or disappointment ; and which might commemorate the defeat of the Egyptians when Pharaoh was disappointed.

So we can say, with a certain confidence, that it was at Bir Hibeita in the marshy desert of Sin that the main body of the Israelites watered on the morning of the 21st April, in the first year of the Exodus.

SOME NEW SELEUCID COINS. II.[1]

By Stella Ben-Dor

1. Demetrius II, Nicator

(Fig. 1)

The coin described below was found in Qumi in the valley of Esdraelon ; it is of bronze, measures 12 mm. in diameter, its weight is 2.83 gr.[2] The *obverse* shows an eagle with spread wings, standing r. The *reverse* displays a thunderbolt ; on r. [ΒΑΣΙΛΕΩΣ] (lower parts of some letters visible, rest off flan) [ΔΗ]ΜΗΤΡΙΟΥ ; on l., [Θ]ΕΟΥ / [ΝΙ]ΚΑΤΟΡΟΣ; on l., outside inscription, a symbol, perhaps a double cornucopiae or a palm-branch ; on l., between thunderbolt and inscription, the letter Ξ. The coin belongs to Demetrius II, but since it bears no date, the question arises when it was struck. Furthermore, it may be asked to which mint it should be attributed.

The obverse type is rather unusual, since as far as I am aware, no eagle appears on the obverse of any Seleucid coin. An explanation of it may perhaps be found in the circumstances under which Demetrius became king. They are best described in Newell's words : " As early as the year 147 B.C., Ptolemy VII Philometor of Egypt . . became dissatisfied with the course of events then taking place in the neighbouring kingdom . . Ptolemy evidently felt that Alexander had now reigned long enough for Egyptian

[1] A previous note was published in this Quarterly, Jan.-Apr. 1946, pp 43-48. I am greatly indebted to Professor A. R. Bellinger of Yale University, who very kindly read through the manuscript and gave me the benefit of his valuable criticism.

[2] The coin is in the Collection of the Regional Museum " Beth Sturman" at Ain Harod-Tel Yoseph. My thanks are due to Mr. N. Cimbalist for allowing me to publish it.

interests and, having advanced as far as Seleucia on the Orontes, found occasion to break openly with him. He proclaimed the little Demetrius . . king in the place of Alexander. Antioch revolted and Alexander fled to the hills (shortly after Oct. 146 B.C., as shown by his Antiochene coins). Ptolemy thereupon entered Antioch and placed his young protégé on the Seleucid throne."[3]

Two Seleucid Coins

Fig. 1. Coin of Demetrius II, Nicator
Fig. 2. „ „ Antiochus VII, Sidetes
(Photo enlarged from 4 to 6 cm.)

We have seen that Philometor advanced as far as Seleucia, and if we accept Bevan's correction of Josephus[4] and read *Seleukeian* instead of *Kilikian*[5], he seems to have met Demetrius there. Immediately after the decision was made to

[3] *The Seleucid Mint of Antioch*, 1918, pp. 55-56.
[4] *Antt.*, XIII, 4, 3.
[5] *The House of Seleucus*, II, 1902, p. 301, Appendix N.

proclaim Demetrius king, he may have struck some coins, and since he owed his kingdom wholly to Egyptian favour, the Ptolemaic eagle would be an appropriate type for this issue.

In support of the latter view it may be added that our eagle shows a striking similarity to that represented on the reverse of the bronze coins of Philometor struck by him in Phoenicia[6], after he had installed Demetrius in Antioch and retained Coele-Syria and Phoenicia for himself.

According to Newell, Demetrius II struck his earliest coins at Antioch in 167 equals 146/5 B.C.[7] Leake published a coin of Demetrius II with the date 166 equals 147/6 B.C.[8] This coin is mentioned by Heichelheim who considers it to be " the earliest coin of this king . . issued . . before Ptolemy VI acknowledged the claims of this new pretender."[9] If the assumption with regard to the circumstances of issue of our coin are admitted, it would follow that it was struck at about the same time as Leake's coin.

With regard to the reverse type it may be pointed out that the thunderbolt is the most common type of the autonomous coins of Seleucia in Pieria during the second and first centuries B.C.[10] It also occurs on some Seleucid coins issued from this mint ; among those of Demetrius II's immediate predecessor, Alexander Balas, mention may be made of some tetradrachms and a bronze coin.[11] Thus the suggestion may be ventured that our coin was struck at Seleucia, especially since this was apparently the meeting place of Demetrius and Philometor.

To sum up : it is suggested that the coin of Demetrius II described above, belongs to the earliest issued of this king, possibly to the year 166, and that there is a likelihood of its having been struck at Seleucia in Pieria.

[6] Svoronos, *Ta nomismata . . . ton Ptolemaiōn* 1904, Nos. 1487, 1488, Pl. XLVIII, 21-23 ; Vol. IV, 1908, col. 303.
[7] *The Seleucid mint of Antioch*, p. 57.
[8] *Num. Hell.*, 1856, Kings and Dynasts, p. 30 [No. 9].
[9] *Hesperia*, Vol. XIII, 1944, p. 364, note 9.
[10] Wroth, *BMCat. Galatia, etc.*, 1899, pp. 269-271.
[11] Babelon, *Les rois de Syrie*, 1890, Nos. 884-886.

2. Antiochus VII, Sidetes

(Fig. 2)

Obverse : Head of diademed king to r., encircled by a border of dots. *Reverse :* Double cornucopiae, the two horns placed alongside each other, springing from a stalk ; in some specimens a leaf may be seen on either side of the stalk ; on r. **ΒΑΣΙΛΕΩΣ**, on l., **ΑΝΤΙΟΧΟ**[**Υ**]. No monogram or date. Border of dots. Flat fabric with strongly bevelled edge. The dies are invariably adjusted ↑↑.

The above coin is found in several collections in Palestine :

No. 1 (Pl. . . ,Fig. 2)		2	3	4	5	6	7
gr.	5.58 4.07	3.94	3.83	3.94	3.06 (after cleaning)		3.43
mm.	20	17/19	19	18/20	18		17/18

Nos. 1-4 are in the Collection of the Pères Blancs of Jerusalem. No. 5 (Inv. No. 2888) and No. 6 (Inv. No. 739) are in the Museum of Jewish Antiquities of the Hebrew University, Jerusalem.

No. 7 is in the Collection of Mr. H. H. Pawel of Tel-Aviv.[12]

The frequent occurrence of the type in Palestine would point to a Palestinian origin of the coins with some degree of likelihood, but we may define the mint-place more closely. The reverse type is almost identical with that of some autonomous coins of Gaza, bearing the inscription Dēmou Gazaiōn and ascribed by Hill to the second century B.C.[13] In fabric too, both types of coins are very similar to each other and both were struck from fixed dies.

Assuming that our coins were minted at Gaza, the omission of the usual sign 𐤆 seems at first sight surprising, but may be due to the similarity with the autonomous coins just mentioned, which do not show this sign either, nor do they bear any date, exactly as is the case with our coins.

[12] My best thanks are due to the Rev. Père N. van der Vliet, to Professor E. L. Sukenik, and to Mr. H. H. Pawel who kindly allowed me to study the coins and to publish them. I am particularly grateful to Mr. Pawel with whom I discussed the iconography of Antiochus VII.

[13] *Brit. Mus. Cat. Palestine*, p. 143, Nos. 1-3.

The obverse of the coins described above represents a portrait head of one of the Antiochi, most likely that of Antiochus VII[14]. If our assumptions are correct, the coins under discussion were struck by Antiochus VII Sidetes in Gaza.

So far only two Seleucid coins are known which can with certainty be attributed to this mint : two bronze coins of Demetrius II Nicator. The first of these, bearing the date 173 (140/39 B.C.) was published by Babelon[15], the other of the year 171 (142/1 B.C.) by myself[16]. Shortly after his latest issue from Gaza, late in 140 or early in 139 B.C., Demetrius was taken prisoner by the Parthians[17] and his younger brother Antiochus VII occupied the Seleucid throne. Since he was the immediate successor of Demetrius in Phoenicia and on the Palestinian coast, it seems quite likely that he continued to use the mint of Gaza as his brother had done before him.

[14] cf. e.g. Babelon, *Les rois de Syrie*, Pl. XXII, 3, 5 ; Newell, *The Seleucid mint of Antioch*, Pl. X, 304.
[15] *Les rois de Syrie*, No. 979.
[16] In the *PEQ*. Jan.-Apr. 1946, p. 44, Pl. 1, 3.
[17] W. W. Tarn in *Cambridge Anc. Hist.*, Vol. IX, 1932, p. 580.

MISTRANSLATIONS

By G. R. Driver

Mr. Simons in an article in a previous number of the "Quarterly Statement" (vol. LXXIX, pp. 87–102) has sought to remove the difficulty in *ʿad bᵉnê ʿammôn* (Numb. xxi, 24) as compared with the parallel *gᵉbûl bᵉnê ʿammôn* (Deut, iii, 16) by altering *ʿad* 'up to' into *ʾereṣ* 'country, land'; but emendation is always undesirable, especially when the M.T. is supported as here by the ancient Vss., and is in these passages in my opinion unnecessary. The words derived from the √*ʿdw* 'to cross over, pass by, run, rush' refer either to time or to space in the Semitic languages, for example the Hebr. *ʿad* "eternity" to the former and the Arab *ʿadāⁿ* "bank of river" and *ʿidāⁿ* "tract of country" (Freytag) to the latter; and I therefore suggest that the Hebr. *ʿad* here is not the preposition but the noun from which it is derived, used not in a temporal but in a spatial sense.[1] Thus the sense of the passage under discussion will be that Israel "possessed his (*i.e.*, Sihon's) land from Arnon unto Jabboq, the extent/reaches of the children of Ammon." This suggested translation may be illustrated by *hiṯbônantā ʿad raḥᵃbê ʿāreṣ* "hast thou considered the extent of the broad places of the earth?" (Jb. xxxviii, 18), if this passage may be so rendered. Indeed, the concordance may well suggest other passages which *ʿad* ought to be taken not so much as a preposition as nominally (*e.g.*, Deut ii, 5).

In connection with my recent article on *yārad* "went up and down" in the "Quarterly Statement" (Vol. LXXIX,

1 The argument is further strengthened by the fact that the Hebr. *ʿad* as a preposition refers either to time or to space as the context requires.

pp. 123-6) I cannot help asking whether this verb is not similarly used in the story of David and Saul at Keilah. In the first part David went from "the forest of Hereth" to the relief of Keilah; and, wherever Hereth lay, it must have been in the Judæan highlands above the plain on to which Keilah abutted, so that he would go down the Wâdî-'sSûr and then climb up its eastern flank to Keilah, which lay at a height of some 1,520 ft. above the sea[1] (I Sam. xxiii, 4).

In the second part Abiathar fled from Saul's massacre of the priests at Nob, which lay at a height of 2,685 ft. above the sea a short way to the N.E. of Jerusalem, down to the coastal plain and thence climbed up to Keilah to join David (I Sam. xxiii, 6), and Saul similarly went down from Nob and up to Keilah to attack David there (*ibid* 8, 11). In every case the journey involved both a descent from the hills of Judah and an ascent on to the spur on which Keilah lay.

1 The name means "spur" or the like, as the Arab. qâ'ilah "oblong mountain" and *qau'alah* "hill, hillock" shows.

REVIEWS AND NOTICES

The River Jordan. Being an Illustrated Account of Earth's most Storied River. By NELSON GLUECK. (The Westminster Press, Philadelphia. $3.50).

This could well have been a most excellent book. Professor Glueck knows the Jordan Valley as do few men. The illustrations are copious and are first-class. They contrive to give a vivid picture of the bizarre character of the landscape, and of the many ancient sites within the confines of the valley. But the author has an unfortunate addiction to purple patches which must be a constant source of irritation to most English readers. Passages such as " Where the Nahr (river) Jalud descends from the plain of Beisan to the Jordan River, the valley throws its arms about it, as if to say ' welcome, my beloved.' Here the valley is from 6 to 7 miles across. Soon, however, the starved hills of Samaria press in severely to break the embrace " may be meant to be vivid, but are merely rather ridiculous. Still more irritating is the trick of pretending to be present at past events, whether seeing palæolithic hunters with " shrill cackling and cries of content " slouching from cover to an elephant caught in a trap, or coming upon the doomed daughter of Jephthah " What frightful fate has befallen a fellow mortal ?. . . We behold a group of maidens gathered round—yes now we know—gathered round the daughter of Jephthah. . . Never shall we forget the tall, slim virgin, winningly robed in deathless white, standing frozen, silent, in the midst of her company " !

But if one can skip such patches, the book can give one a vivid picture of the geography of the Jordan Valley and its extraordinary richness in archæological and historical material. From its source the author proceeds downstream to the Dead Sea describing the ancient sites as he goes.

The result is somewhat chronologically confusing, as on the same page one finds the Church of the Loaves and Fishes and the chalcolithic Khirbet Kerak, but he clearly had to choose between a chronological and topographical treatment, and his choice of the latter does at any rate emphasize the palimpsest-like character of such an area.

The author seems to be most at home in the Early Bronze Age. In others he makes surprising mistakes. For instance, he states that it would be " well over a thousand years before there was any possibility of committing 'the story of Abraham' to paper." It would not in any case have been committed to *paper* for very many centuries after that, but Abraham is usually considered to be about contemporary with Khammurabi of Babylon, whose reign is now generally dated to the eighteenth century B.C., and recent discoveries have carried the beginnings of writing in Palestine and Syria well back into the second millenium, and certainly the even probably backward Hebrews must have been well-acquainted with it long before the eighth century. Another surprising slip is that he twice refers to Marcus Agrippa as Emperor of Rome. Agrippa was the chief naval and military lieutenant of Augustus and the father-in-law of Tiberias, but he was never Emperor.

One could wish that Professor Glueck would write a severely pruned version of this book, with all and more of his excellent illustrations, and there would then be a good addition to the literature on that subject of perennial interest, the topography of the Holy Land.

K. M. K.

Ancient Jewish Coins. By A. Reifenberg, 2nd edition revised. Rubin Mass, Jerusalem, 1947. 66 pages, xvi plates. LP.1.

The second edition, containing several important new coins, of Mr. Reifenberg's scholarly work on the coins of the Jews is most welcome at a time when almost every numismatic work is unobtainable or obtainable only at " black market " prices. This survey covers coins struck in Palestine

during the time of Persian domination, the coins of the Procurators and the commemorative Judaea Capta issues of Vespasian and his sons, in addition to coins of the Maccabees, the Herodians and the two Revolts. Twenty-eight pages are devoted to a catalogue which numismatists will find invaluable, the remaining thirty-eight give the essence of Mr. Reifenberg's researches into the coinage of the Jews. Mr. Reifenberg is to be congratulated on an interesting treatment of the subject which while presenting his own considered judgment sums up with admirable conciseness the views of previous students. Amongst many good things we should like to single out the assignment of the anchor-flower restrikes with name of Jonathan to John Hyrcanus II. As regards the coins assigned to Simon Maccabaeus, Mr. Reifenberg's hesitation is well justified, the balance of evidence is overwhelmingly in favour of the time of the first Revolt. In conclusion we should like to make two criticisms. One, there is no discussion of the difficult subject of the relation of the bronze coins to the silver. Two, some of the photographs are still not up to the standard of the text or the otherwise high standard of printing and production.

J. S. KIRKMAN.

In the Beginning. By S. H. HOOKE. The Clarendon Bible : Old Testament, VI. Pp. x, 166. (The Clarendon Press, Oxford, 1947).

Since the volumes of the Clarendon Bible are not numbered in the order of their appearance, it would have been more fitting if this volume had been numbered Vol. I, and Professor Wardle's, which deals with the History and Religion of Israel throughout the Old Testament period, had been Vol. VI. Professor Hooke modestly expresses the fear that his readers may think this volume, appearing so long after the other volumes of the Old Testament series, to be but *ridiculus mus*. He need have no such fear. He has achieved

a marvel of compression, and within his few pages he has given us a work which commands the unqualified admiration of the reviewer, and which will put every reader well abreast of the latest scholarship on all the complex problems that gather round the book of Genesis.

During recent years there have been many significant changes in the approach of scholars to these problems, and if this volume had been published ten or fifteen years ago it would have been a very different book in many respects. Professor Hooke has not given us just one more handbook on Genesis, rehashing the substance of so many others published early in the century, with a few minor individual features, but the only book of its kind which we have, and one which is quite indispensable to every Bible student who would be well-informed.

In some respects we have more conservative conclusions than were found in the earlier books. Nowhere is this more marked than in relation to Gen. xiv. No longer is this regarded as a late midrash, but as a valuable chapter containing an important deposit of history. Professor Hooke is doubtful of the equation of Amraphel with Hammurabi of Babylon, but adduces the evidence examined by Sidney Smith in *Alalakh and Chronology* to show that if he is to be identified with either that Hammurabi or one of his two contemporary namesakes, the date of Abraham would have to be brought substantially later than was formerly supposed. It may now be added that Böhl[1] would bring down the date even lower than Sidney Smith's. Both here and elsewhere Professor Hooke makes full use of the evidence brought to light in the Mesopotamian area in the years immediately preceding the war, while he also utilizes the rich material provided by the Ras Shamra excavations.

The view that the book of Genesis is a compilation from three main sources, differing widely in date, is still accepted by Professor Hooke, though he rightly informs his readers

[1] Cf. *King Hammurabi of Babylon in the setting of his time*, 1946. Leiden. Cf. too Van der Meer, *The Ancient Chronology of Western Asia and Egypt*, 1947. Leiden.

that Old Testament scholarship speaks with far less unanimity on this question than it did. Moreover, he emphasizes the fact that our present-day sources of knowledge make it probable that Israel had written accounts of her traditions at a much earlier date than the compilation of J. Nevertheless, he doubts if the compilers of J and E used older written sources for the main elements of their work, but believes they rested on oral traditions only. In this connexion he emphasizes the "long gap" in the story between the death of Joseph and the birth of Moses. But how substantial is this "gap"? The chronology of Ex. xii. 40, makes the Sojourn in Egypt cover 430 years, but Professor Hooke does not accept it. Nor is there any reason to suppose that the compilers of J and E accepted it. Professor Hooke notes that the usually accepted Hyksos period for the Descent into Egypt is on more than one count unsuitable, and he might have added here that the newer dating for Abraham would also make this impossible. He himself puts the Descent after 1400 B.C., and the Exodus under Moses before 1250 B.C. The "gap," therefore, has entirely disappeared.

Professor Hooke divides the book of Genesis into three parts, described as myth, saga, and story respectively. The first consists of the first eleven chapters, and deals with origins; the second deals with the patriarchs; and the third contains the story of Joseph. There is an excellent chaper on "myth," in which the precise sense in which the word is here used is defined by the arch-priest of the "Myth and Ritual" school. The distinction between myth and saga, and between both and the story, is well expressed, and the separate elements of all three sections of the book receive careful treatment in the succeeding chapters.

Professor Hooke offers no evidence that the texts in his first section were ever Israelite "myths." Indeed he recognizes that they have been transformed into ætiological texts or into texts which were the vehicle of a fundamentally spiritual message. For instance, he resolves the story of Cain and Abel into a ritual sacrifice of the fertility cult, instead of a

murder motivated by jealousy, and Cain's flight is explained as the ritual flight of the officiating priest.[1] Yet if this explanation is true, it is only relevant to a stage of the "myth" that lies far behind the Old Testament. The J writer—or an older oral composer—has converted it into a story of human jealousy, and told it to teach a religious lesson. There is no evidence—and Professor Hooke does not allege any—that in its Biblical form it was a ritual text, or that in any form it was ever an *Israelite* ritual text, or "myth." Indeed, it must long have ceased to be a ritual text before it was so freely handled and transformed.

It is, therefore, important that we should not merely consider the primitive ideas which were expressed in the original form of these chapters—a form which they no longer have, and which is not securely recoverable—but that we should study the purpose of the Biblical writers in writing them, and the message of which they intended them to be the vehicle. Accordingly Professor Hooke not only brings the wealth of his knowledge of the ancient past to illuminate the probable original meaning of the traditions which have been transformed, but gives us chapters on the religion of the patriarchal period, the religious point of view of the narrators of the present texts, and the permanent religious value of the book of Genesis. At the end there is added a valuable chapter by the late Edwyn Bevan on "The Religious Value of Myths in the Old Testament."

Throughout we have a volume marked by the highest scholarship and balanced judgment, abounding in information and deftly handling the variety of traditions which are collected in this book. Students of every level will read it with profit, and not a few will share the reviewer's wonder that the author has contrived to say so much in a book so brief.

H. H. Rowley.

[1] A very similar interpretation has recently been published by Professor Ivan Engnell, of Upsala. Cf. "Kain och Abel: en rituell interpretation," in *Svenska Jerusalemsföreningens Tidskrift*, Oct.-Dec. 1947, pp. 92-102. I am indebted to Professor Engnell for a copy of this paper, and to Professor G. W. Anderson of Handsworth for an English abstract of it.

The Committee have to acknowledge with thanks the following :

Antiquaries Journal, July–October, 1947.
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Expository Times, October, November and December, 1947. January, February and March, 1948.
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Birth and Childhood among the Arabs. By Hilma Granquist.
Southern Palestine Geological Map on a scale of 1 : 250,000. By S. H. Shaw (Government Geologist, Palestine).

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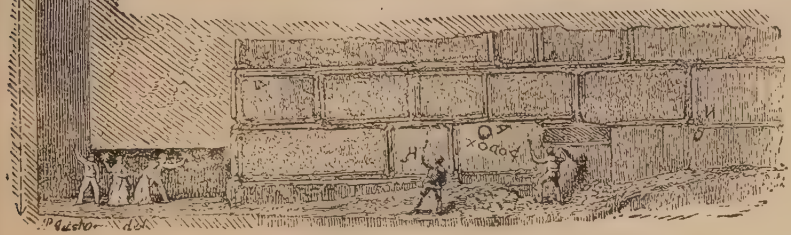

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NOTES AND NEWS

A recent discovery which Professor Albright describes as "unquestionably the greatest manuscript find of modern times" calls for notice here. It is reported by Professor Sukenik that some bedouin found in a cave near the north shore of the Dead Sea a number of rolls concealed in pottery jars, wrapped in linen and covered with pitch for protection. Of the rolls, which seem to be at least eight in number, some have been purchased by the Hebrew University in Jerusalem and are being studied by Professor Sukenik, while others have been bought by the Syrian Orthodox Monastery of St. Mark in Jerusalem. The most important of the latter is a complete scroll of the book of Isaiah. Palæographic evidence would seem to suggest that the script of the scroll is earlier than that of the Nash Papyrus of the Decalogue ; hence the MS. may go back to the early Maccabæan period. If subsequent examination should prove this estimate to be well founded, then Professor Albright's words will indeed be justified. Further news will be eagerly awaited.

In the same issue of the BASOR, No. 110, in an article which occupies the greater part of the Bulletin, Professor Albright has carried the decipherment of the early alphabetic inscriptions from Sinai to a stage far beyond that hitherto reached by Semitic epigraphers. He has given a transcription and translation with philological notes of ten inscriptions,

together with a valuable table of signs. His summary of conclusions is as follows :—" I consider the Proto-Sinaitic script as normal alphabetic Canaanite from the early 15th century B.C. The language is also vulgar Canaanite, with dialectal peculiarities which distinguish it slightly from contemporary Byblian and can be paralleled in the Amarna tablets from Palestine as well as in Ugaritic. The miners themselves seem to have been, in general, Northwest-Semitic captives or slaves from Egypt, presumably mixed in origin ; they may be taken to represent a cross section of the Semitic population of the north-eastern Delta some century-and-a-half or two centuries before the Mosaic Exodus. The discovery of more inscriptions in Serabit will thus have considerable importance for Israelite origins as well as for the history of the alphabet."

Under the heavy clouds of economic depression and international strife the archæologist continues his labours. In *The Times* of April 23 Professor Garstang gave an account of the discovery of a forgotten Hittite city in the foothills of the Taurus Mountains. The site, known as KaraTepe is being excavated by an expedition from Istanbul headed by Professors Bossert and Bahadir Alkin. Various important inscriptions have been discovered, some in Aramaic script and some in the later Hittite hieroglyphic script. Professor Garstang points out that this is the first time that these two scripts have been found in close association. It is hoped that even if these two inscriptions do not prove to be a bi-lingual text, they may provide clues to decipherment. A place-name, Danuna, has been identified, and forms a possible link with the name of a people frequently mentioned in Egyptian and Assyrian records, the Danau, or Danaoi. Professor Garstang remarks that " the various threads of evidence, slender and nebulous though they be, begin to weave themselves together and to gather strength from the interlacing of Homeric legend with the historical records of Egypt and Syria." Further developments will be awaited with interest.

Professor André Parrot, Chief Curator of Oriental Antiquities at the Louvre, has recently been visiting London, and has given an account of the present stage of the excavations at Mari, and of the most important results obtained from them. Professor Parrot points out that Assur, Mari, and Ur were the three cities which, in early part of the 2nd millennium B.C. decided the destiny of the ancient Near East. The region of the Middle Euphrates had a definite strategic importance. For this reason the kings of Agade had, in the neighbouring region of the Khabur, already built the citadel of Brak, discovered by Mr. Mallowan, and intended to protect the northern frontier of their empire. For the same reasons the Sumerian kings of the 3rd dynasty of Ur secured the control of Mari by means of governors, who, however, gradually achieved their own independence. The Assyrian kings obtained possession of it for a time, until it fell at last into the hands of Hammurabi of Babylon. With the help of the royal archives of Mari the story of this obscure period of history takes shape and becomes clear. It is, in M. Parrot's words, " the story of the patriarchal age of the time when from the direction of Ur the caravan of Terach skirted the ramparts of Mari in its march towards Harran."

The archæologists have also been busy in another part of Mesopotamia. The Directorate General of Iraq has just brought to a close a second season of excavation at Abu Shahrain, the site of the ancient city of Eridu, which tradition has regarded as the most ancient city of Sumerian times. The finds have substantiated this claim for Eridu, and have also refuted the generally held view that habitations discovered at Tall al 'Ubaid in 1924 represented the earliest settlement in the delta. The reports state that at the 16th level, nearly ten metres below the surface, the al 'Ubaid pottery suddenly disappeared, and gave way to an entirely new class of elaborately painted pottery resembling in some features the earliest pottery found in the north of Iraq. At the same level were found the walls of a minute temple, the

forerunner of the fifteen temples above it, and the earliest building of its kind yet known to archæologists. Here then were disclosed both the pottery and the architecture of a new culture, the culture of settlers who were prior to the al 'Ubaid dwellers, and, since no traces of this culture were revealed by deep soundings at Ur or any other Sumerian site, the claim of Eridu to be the oldest city in Mesopotamia still holds good.

The attention of readers may be drawn to a new archæological journal which made its appearance last year entitled *Revue de l'Histoire Juive en Égypte*. The history of the Jews in Egypt is a subject of great interest and importance, and if the new journal succeeds in maintaining the standard achieved by the first number it will prove a valuable addition to the many specialist journals now appearing. It contains articles in English and French, with a summary of the articles in Arabic at the end. Among various excellent contributions may be mentioned as likely to be of special interest to the readers of this journal an article by Dr. Maisler with the title, *Palestine at the Time of the Middle Kingdom in Egypt* and one by the Editor, M. Gráseloff, entitled *Édom d'après les sources égyptiennes*. Further information may be obtained from the office of the Société d'Études Historiques Juives d'Égypte, Le Caire, Sekket el-Maghrabi, Boite Postale 399.

In the *Revue Biblique* for Jan., 1948, there is an interesting article by R. P. H. Cazelles on *A Ritual of Deuteronomy* (Dt. xxvi, 14). The crux of the verse lies in the meaning of the Hebrew word *'ōn*, a word which is a cause of perplexity in several passages of the Old Testament. M. Cazelles has brought together the various translations of versions and commentators, among whom, by the bye, it is curious to find the late Professor S. R. Driver cited as Mr. Sam. Driver ! Doubtless an unintentional discourtesy. But the special interest of the article lies in the way in which the author has used the grammar and vocabulary of the Ras Shamra

texts to elucidate an obscure point in the Old Testament. We have here an earnest of the future use of the language of Ugarit for the fruitful interpretation of the Old Testament.

In the latest issue of *Biblica*, vol. 29, 1-2, Father E. F. Sutcliffe discusses with learning and judgment a point which Professor Kahle's Schweich Lectures has again brought to the attention of scholars, namely, the question of Jerome's pronunciation of Hebrew. It is clear from the evidence that in the 4th century A.D. the usual pronunciation of Hebrew differed in many important respects from the pronunciation standardized by the Massoretes and upon which the rules of Hebrew grammar as accepted to-day are based.

In the *Jewish Quarterly Review* for April, 1948, Professor Solomon Zeitlin continues his studies in the canonization of the Hebrew Liturgy and discusses the problem which still occupies the attention of students of Christian Origins, namely, the question of whether the last meal of Jesus with the disciples was a Passover Supper or not. The article will repay study.

In 1929-30 M. Dunand discovered in Byblos, the ancient Gebal, a group of inscriptions the script of which baffled the experts. Many of the signs resembled Egyptian hieroglyphics ; the signs were too numerous to suggest an alphabetic script, and not numerous enough to indicate a true syllabary. M. Dunand gave the name of " pseudo-hieroglyphic " to this perplexing script. In 1946 Professor Dhorme announced to the French Academy that he had succeeded in deciphering the script, and in *Syria* XXV, 1-2, he has published his results with a fascinating account of the methods by which he solved the riddle of the inscriptions. His article is followed by a complementary article on *The Origin of the Alphabet and its First Evolution in the Light of the Discoveries at Byblos* by Professor Dussaud. Professor Dhorme's contribution to the decipherment of the Ras Shamra script is still fresh in our minds, and though the

actual contents of the Byblos inscriptions may not have the importance of those of the Ras Shamra tablets, nevertheless, as M. Dussaud shows, the decipherment of the pseudo-hieroglyphic script of Bybles constitutes a landmark in the history of the alphabet. In the course of his valuable article M. Dussaud records an incident which is worth quoting. It concerns a curious experiment made by the late Professor de Groot. The Professor asked a girl of nine to make up, out of her head, a new alphabet of 26 letters. In three minutes the child had produced the required alphabet, and out of the 26 letters, 7 were identical with 7 letters of the inscription on the sarcophagus of Ahiram, while others corresponded with letters of the Sinaitic inscriptions, and of inscriptions in Cyprus and in Crete. M. Dussaud's comment is, "it is child's play to invent an alphabet." !

A new illustrated leaflet has just been published to give a popular account of the work of the Palestine Exploration Fund, since the leaflet previously in use was printed ten years ago and is somewhat out of date. If a postcard is sent to the office at 2, Hinde Street, W.1, the Executive Committee of the Fund will be very glad to supply copies free to any subscriber who would like to help to distribute this new leaflet among those who might be interested in the objects for which this organisation exists.

The work of the Fund enjoys very wide support and has a well-deserved reputation for being done on strictly scientific principles. Recognition has now been given to this by the fact that the Fund is honoured to include among its Vice-Presidents His Grace the Archbishop of York, the Rt. Rev. the Bishop Auxiliary of Westminster, the Very Rev. the Chief Rabbi, the Director of the Islamic Cultural Centre, and Sir Henry Dale, O.M., F.R.S.

DISCOVERIES IN PALESTINE SINCE 1939

By C. N. Johns

(Department of Antiquities, Jerusalem)

With the outbreak of war in 1939 the participation of other countries in the exploration of Palestine necessarily came to a stop. On the other hand, with the cessation of internal troubles, a new impetus was given to building and all forms of public works. The construction of a large series of police stations was put in hand almost at once, and as the war spread into the Mediterranean, more and more military establishments were created. All these works involving excavation, in a country so thickly studded with sites of ancient occupation as Palestine is, meant that archæological discoveries were made inevitably and in quick succession.

Under the Mandatory government it has fallen upon the Department of Antiquities, to watch such works, public or private ; to investigate discoveries, small and large ; and to record such information as it can, without unduly delaying the contractors.

We were kept very busy for two or three years with these chance discoveries. Latterly we had the help of some local archæologists, notably those on the staff of the Hebrew University in Jerusalem and others of the Jewish Palestine Exploration Society. It is their discoveries and ours, made since 1939, that I shall deal with chiefly (so supplementing G. E. Kirk's article in the P.E.Q. for July-October, 1946, pp. 92–102).

At the same time the Department has so far as possible pursued its own programme of work in clearing the ruins of the early Muslim palace near Jericho, and last year I was able to resume and practically complete our work at the Citadel of Jerusalem, to supplement the results which I described in the Quarterly for April, 1940.

Of the various overseas institutions who contributed so much in the pre-war years, only one, the French School of Archæology as represented by the Dominicans of Jerusalem, has undertaken fresh excavations, working to a scientific plan ; owing to greatly increased labour costs, their excavations are on a small scale but have been continued for a second season this year.

Prehistoric (to Early Bronze) :

Permit me to begin with Adam and the Fall, I mean that epoch-making step in human development which is summed up in the verse : " to till the ground from whence he was taken ". That crucial advance in the food quest, from the uncertainty of hunting animals to the security of some reserve of cultivated food, took place in the Middle East rather less than 10,000 years ago. It emerges in the latest of that very long series of Stone Age deposits which Miss Garrod so successfully investigated in the caves of Mount Carmel. It is continued in the lowest levels of the earliest fixed settlements or villages on sites such as Jericho, and Beisan, which are among the oldest in the world. We still have to formulate the transition from one to the other ; but I understand from Mr. John Waechter of the British School of Archæology in Jerusalem, who was with us this summer working on the subject, that a direct connection can be established, thanks to several excavations made before the war by Monsieur Réné Neuville. During the war Dr. Stekelis, working for the American School of Oriental Research, made soundings in other caves on the slopes of Mount Carmel which may contribute to the solution (see *Quarterly of the Department of Antiquities, Palestine*, vol. XI, pp. 115–118).

At all events, the succeeding stage in which peasant communities had come into existence and a little metal was used for tools along with stone, *i.e.*, the Chalcolithic, has been well illustrated by recent work on two sites : Kh. Tell el Far'a in central Palestine and Kh. el Karak beside the Sea of Galilee. The former lies in the hills north-east of Nablus and at the head of the great Wadi el Far'a which runs down to

the Jordan. The French School have been making soundings here, and they have found successive levels of occupation lasting from the Chalcolithic well into the Bronze Age, *i.e.* from the 4th millennium until the 2nd millennium B.C. The lowest, Chalcolithic levels, are especially important here because they show that early pottery types at first thought to be distinctive of the north of Palestine, since they were first found there, viz., the grey-burnished " Esdraelon " ware of Megiddo, Beth-shan and 'Afula (E. L. Sukenik, *Journal of the Palestine Oriental Society* XXI (1948) pp. 1ff, had in fact spread to the centre of the country at least (R. de Vaux, *Revue Biblique*, 1947, pp. 394–433, pls. X–XX).

At the other site, Kh. el Karak, which lies beside the Sea of Galilee between its present outlet to the Jordan and an older outlet some hundreds of yards to the north, a long section was cut right down to virgin soil at the southern edge of the mound. The Department of Antiquities imposed this condition before allowing the neighbouring Jewish settlements to build an agricultural school there ; the work was done at their expense and carried out by the Jewish Palestine Exploration Society under Dr. Maisler of the Hebrew University (see *Bulletin of the Jewish Palestine Exploration Society*, vol. XI (1945), pp. 77–84). Here the lowest level was Chalcolithic, with the same grey-burnished ware ; the succeeding levels were stages of the Early Bronze period (I–III). At the edge of the mound the trench crossed a massive rampart of mud brick which was found to date from the first Early Bronze stage (end of the 4th millennium B.C.). At this and the second stage there was evidence of contact with Mesopotamia and Egypt in successive periods : with Mesopotamia in the phase proceding the 1st Dynasty of Ur (the Jamdat Nasr phase, as identified by its peculiar stamped jar-sealings) and with Egypt at the time of the 1st Dynasty (from c. 3000 B.C., as shown by fine pottery of " Abydos " type).

Thus the settlement at Kh. el Karak was already a station on the trade route between those two early civilizations at that remote time, towards the end of the 4th millennium B.C.

when their first cities, the oldest in the world, were growing up. By its position at the Jordan outlet it commanded the ancient route which came down from the Hauran and Trans-Jordan, crossed the river here and climbed into the hills towards Nazareth before dropping down between Mount Tabor and Nazareth to cross the northern plain, traverse the pass of Megiddo and continue along the coastal plain southwards. Between the Jordan and Mount Tabor, its deviating course up the gentle ascent of the Wadi Fajjas to Lubiya and down to the plain via Dabburiya has been traced by the Finnish archæologist Saarisalo from a chain of mounds strewn with potsherds of the period. Until quite recent times the ascent to Lubiya was regularly used by the grain caravans from the Hauran on their way to Acre[1].

On another part of the vast mound of Kh. el Karak, at the north end overlooking the old outlet of the Jordan, the Jewish Palestine Exploration Society has made another excavation, again as a preliminary to building and this time under the auspices of the General Confederation of Jewish Labour. Here a remarkable building of the third stage of the Bronze Age (about the middle of the 3rd millennium B.C). has been cleared and will be preserved. Its rubble foundations presumably carried a mud brick superstructure to contain a number of hollow circular pits or silos, perhaps nine in all, each 30 feet across and divided radially into four (Pl. I, 1 ; see also *Bulletin of the Jewish Palestine Exploration Society*, vol. XIII (1947), pp. 53–64). Was this a temple granary such as existed in the cities of Mesopotamia and Egypt such as Joseph may have used in Egypt a thousand years later ?

Of the Early Bronze Age also, it appears, are the numerous dolmens which stand on the lower slopes of the Zerka valley, the ancient Jabbok, in central Trans-Jordan. On behalf of the British School of Egyptian Archæology in Palestine, Dr. Stekelis has examined a number of these megalithic monuments, the counterpart of those known in Egypt, and he has found that they contain not only potsherds typical of the period, but also remains of cloth. In many cases they are

[1] Saarisalo, *Journal of the Palestine Oriental Society*, IX (1929), pp. 27ff.

surrounded by a wide circle of small field stones which, he suggests, may indicate former tumuli otherwise eroded away. His account of this novel enquiry has still to be published, and I am indebted to Dr. Stekelis for communicating these results.

In general this new work fits in with what had previously been done at Jericho, Beisan and Megiddo at low levels. However, after comparing results, Père de Vaux, the director of the French dig at Kh. Tell el Far'a, is of the opinion that it may now be possible to co-ordinate the sequence of cultures rather more closely than hitherto ; the differences in pottery and implements should be regarded, he thinks, not as a gradual strung-out sequence but rather as the impact of parallel, overlapping developments coming from different directions, such as English prehistoric students now postulate for the corresponding phases which took place in Britain over a thousand years later. Regarding the peopling of Palestine we still have much to learn for the long period preceding the period of Semitic predominance, which began only towards the end of the third millennium B.C.

Canaanite (Middle to Late Bronze Age) :

The subsequent period, better known as the Canaanite, is now fairly well known, thanks to the large-scale excavations of the last 25 years, especially at Beth-shan (Beisan) and Megiddo. This period began under Babylonian influence but came more and more under the influence of Egyptian civilization ; from the middle of the 2nd millennium B.C. the Egyptians were rulers of the country until, with their decline, foreign invaders overran the country, the less civilized Philistines on the coast, the uncivilized Israelites in the hills. The country was then divided among the thirty odd petty kingdoms listed in the Book of Joshua, each with its capital town, " fenced cities " like Megiddo and Beth-shan. Some must have come into existence much earlier to judge from the early rampart at Kh. el Karak by the Sea of Galilee. Their material culture is well illustrated by the reliefs and

paintings in the Egyptian monuments made at the time of the Egyptian conquest. But for two or three centuries before that, during the Hyksos occupation of Egypt, the country was practically a part of Egypt since it was under the same rulers. Even then Egypt was making itself felt along the coast as is shown by some ivory plaques of the period which came to light in graves during quarrying near Nabi Rubin, south of Jaffa ; they include both figure and animals of Egyptian type, which must date two centuries before the Egyptian conquest (J. Ory, *Quarterly of the Department of Antiquities, Palestine*, vol. XII, pp. 38–40 and Pl. XIV).

Of much the same period is a small temple which was uncovered this spring at the Jewish settlement of Nahariya on the seashore north of Acre, again on a site " ripe for development ". It was in use only for two or three hundred years yet it was rebuilt once in that time, while its floor level rose several times. In the photograph (Pl. I, 2), the slabs which footed the roof posts remain at the highest level, on pillars of soil which were left as the digging proceeded. What showed it to be a temple were the numerous miniature pots, like child's toys, which can only have been votive offerings ; or again some clay models of doves, perhaps Astarte's doves. However, it was situated not in a grove but on the seashore. There was a well for water and opposite this, a short distance into the sea, a spring of fresh water wells up. Was it for this reason that the temple was placed here ?

Of the next period, following the Egyptian conquest, when the country was thrown open, perhaps for the first time, to trade from overseas, from Cyprus and Crete, we have a single group of burials from another site in Wadi Rubin—Dhahrat el Humraiya, near El Jisr. There was typical pottery and jewellery of foreign type, which is to be published shortly in the Department's *Quarterly* by Mr. Ory, Inspector for that area (Vol. XIII, pp. 75–89).

Phœnician and Israelite ; Jewish.

With the breakdown of Egyptian rule and the consequent Israelite and Philistine invasions, the country of course fell

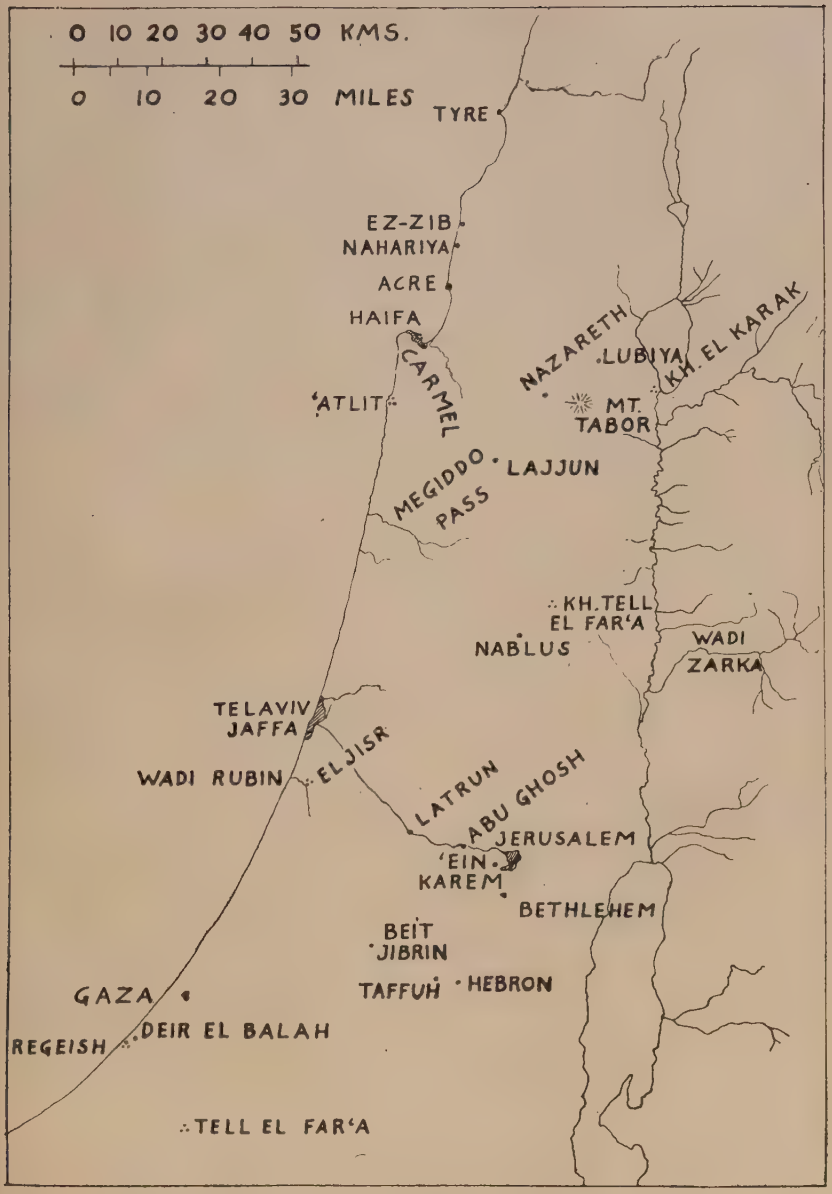

FIG. 1

MAP SHOWING SITES OF EXCAVATIONS SINCE 1939

into two zones, maritime and upland, a division that persisted for the next thousand years, until Roman rule at last diffused Greek culture over most of the country. The remnant of the Canaanites survived on the coast from Mount Carmel northwards, launched out as traders and met the Greeks, who called them Phœnicians. Apparently they returned to the southern part of the Palestine coast as traders ; for their peculiar cremated burials were found by the late Sir Flinders Petrie at one of the mounds he dug inland from Gaza (Tell Far'a)[1] and have been found again on the cliffs south of Deir el Balah (between Gaza and Rafah), in a sounding made when it was proposed to put a coastguard station there. The burial urns (Pl. II, 1) strongly resemble those which occur on the sites of undoubted Phœnician settlements overseas, *e.g.*, at Carthage, and must date from around 800 B.C.

In Phœnicia proper, on the sea-coast north of Acre, we examined a number of graves in two cemeteries near Ez-Zib, the site of Achzib or Ecdippa. While the North Somerset Yeomanry were encamped there, they drew our attention to the plundering of ancient graves, and we had to excavate the undisturbed tombs then visible lest they should be looted also. Here, in the Phœnician homeland, inhumation was the rule ; the burial chambers were rock-hewn and were approached from a shaft with reserved rock steps (Pl. III, 1). The burials proved to be of the 8th or 7th century B.C. or later. The older graves contained decorated pottery typical of the urn burials at Regeish and of other Phœnician sites in the Eastern Mediterranean, both red-and-black painted ware and also lustrous red-slip ware, especially those highly polished juglets commonly decorated with horizontal bands and concentric circles in black (Pl. II, 2) such as the Swedish Expedition in Cyprus found at the site of Amathus (Gjerstad, *The Swedish Cyprus Expedition*, Vol. II, *e.g.*, Pls. XI–XII and CVI, 689) or such as was found with a group of cremated

[1] See *Beth-Pelet*, vol. I, p. 12 with list on Pl. LXVIII and pottery types 33 S, T, U, V 2 and 44, L 4 in Garrow Duncan, *Corpus of Palestinian Pottery*. Cf. *Ancient Gaza*, I, Pl. XLIII, 31 L 2 ; II, Pl. XXIX, 31 L 3.

burials at 'Atlit, south of Haifa (*Quarterly of the Department of Antiquities in Palestine*, vol. VI, see pp. 130–141f. for parallels). There were also pottery figurines portraying women (Pl. III, 2 shows an example). Associated with the tombs in one of the cemeteries, which remained in use during the Persian and Hellenistic periods, were several inscribed stones, one mentioning " 'Ama the Smith ", another " ' Amihud " (?), and these are noteworthy as the first Phœnician inscriptions to have been recorded in Palestine. Yet another cemetery, of Hellenistic date solely, was encountered nearer Acre, at Sheikh 'Izz ed-Din to the north of the town, during the excavation of sand ballast for the Army.

Of the contemporary Israelite occupation inland I have nothing definite to report. It is possible that the French site to the north-east of Nablus, Kh. Tell el Far'a, may be the site of Tirzah, the capital of the Northern Kingdom prior to Samaria ; the site was certainly occupied at that time, but while the identification remains possible, it is too much to expect to prove it in the restricted scale of the present excavations. Culturally this was a backward period, with perhaps only two outstanding towns, the capitals of the two kingdoms, Samaria and Jerusalem. Both were small towns by later standards ; thanks to the pre-war excavations at Samaria in which the Fund and the British School took part, we know more about the Samaria of the Kings than we do of Jerusalem, and by analogy with the size of Samaria then, I think we must revise our notions of the extent of Jerusalem under the early Kings. I submit that most of our Bible maps exaggerate it ; the new American atlas, the " Westminster Historical Atlas to the Bible " (Philadelphia, 1945), is the only one I have seen which seems to me to present a likely picture of the growth of the Jewish city.

We should all agree, I think, that Jerusalem originated, not on the western hill now known as Mount Sion, but on the eastern hill which, in consequence of the Fund's excavations there, has come to be known as Ophel (see plan, Fig. 2). This ridge, with the only permanent spring in the district, was the original " strong hold of Zion, the same is the city

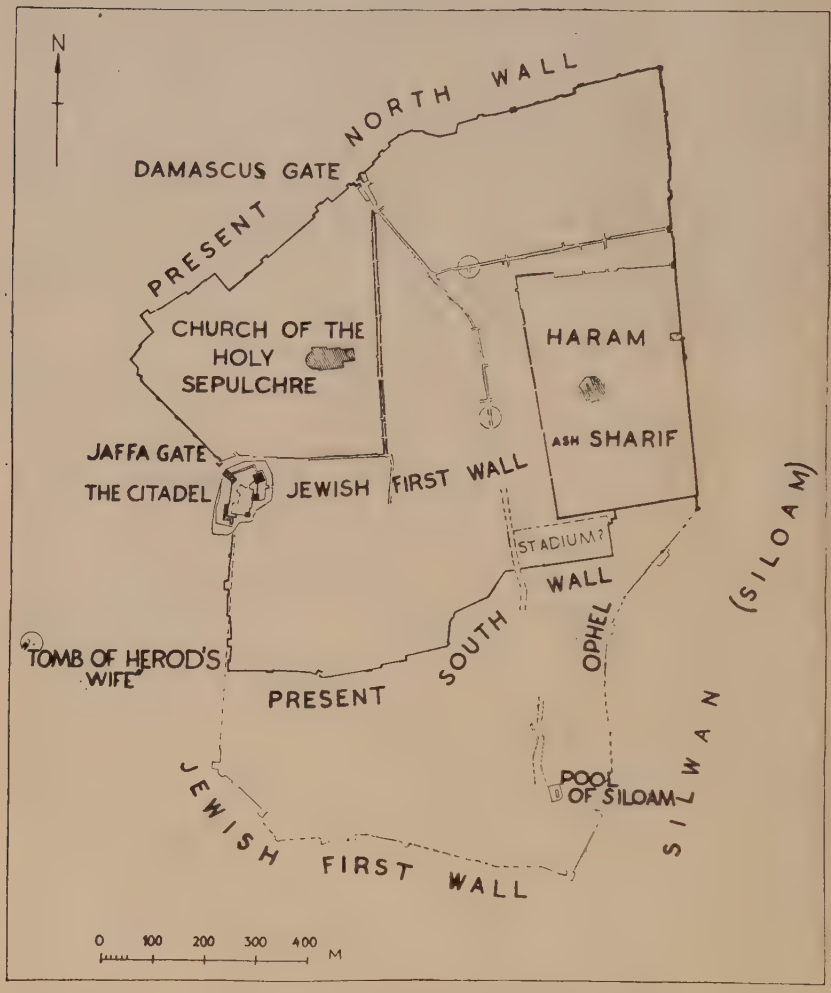

FIG. 2

PLAN OF JERUSALEM WITH THE KNOWN PORTIONS OF ANCIENT PAVING IN THICKENED OUTLINE, OR ENCIRCLED, OR IN BROKEN OUTLINE

of David " (II Sam. v, 7). To this King Solomon added the Temple on the north. But when was the western hill included in the same circuit of walls as the eastern hill and the Temple? We had hoped that our excavations at the Citadel of Jerusalem, on the western hill, would throw light on this question. Those who have seen my article in the 1940 volume of the *Palestine Exploration Quarterly* will recall that in the courtyard of the medieval castle we uncovered portions of a massive stone wall with salient towers, one of which was the Herodian tower Phasael, the enormous base of which still stands (" David's Tower "). We could see that its base was but an insertion in an older line of fortification, which had similar though smaller salient towers.

Last year we made a sounding against the surviving masonry at the front of one of these, which we call the " middle " tower, or " corner " tower (Pl. IV, 1). The stratification showed that this was not much older than the Herodian tower; so far as we can tell, without having cleaned and identified all the coins from the pre-existing deposits in front of the foundations, it is work of the end of the 2nd or the earlier half of the 1st century B.C.—of John Hyrcanus or Alexander Jannaeus perhaps—as was the adjacent straight curtain wall to which Herod added his huge tower towards the end of the century. But from our previous sounding against this curtain wall we knew that it had been built on top of an earlier wall of clumsier construction, founded on the rock. We recognized similar masonry on nearly the same line at the back of the " middle " tower; most of it consists of roughly hewn stones laid in courses, but some of it of unhewn boulders which look still older (see *Palestine Exploration Quarterly*, 1940, Pl. VIII, 1). We dug down in front of this part also, hoping to trace it down to rock and so learn something of its age. Low down we encountered what remained of the closely packed blocking of the base of the 1st-century " middle " tower. We managed to penetrate several courses before the pit finally became too narrow. But although we did not reach the rock, I think we were pretty close to it where we left off; so close that it

seemed unlikely that any deposits would be found of sufficient depth to date the older wall, for it seemed that the rock had been fairly thoroughly cleared to make way for the foundations of the tower. Hence our sounding here proved inconclusive. Yet I am inclined to think that even this primitive-looking wall cannot be older than the Maccabean period, like the earliest wall to the north of it ; for the evidence we have found for an earlier occupation of the time of the Monarchy is of the scantiest.

More light on this question could no doubt be obtained by working across the line of the western city wall of to-day to the south of the Citadel, where digging would be less hampered by later building. It happened that when the Romans destroyed the Jewish city they preserved the Jewish city wall along here to cover the barracks of their garrison.

On the hill opposite the Citadel, close to the " King David " hotel, there is another Jewish monument, the so-called " Tomb of Herod's Wife " (see plan, Fig. 2)[1]. It is a very fine rock-cut tomb lined with excellent masonry and closed with a great rolling stone (Pl. IV, 2). When the Army decided to turn it into an emergency signal station, we opened up the original shaft as an extra exit. With this one alteration it has now been restored to its owners, the Greek Orthodox Patriarchate. Was this Herod's tomb, the one he intended for himself and then used for his wife Mariamne, building himself another on that conical hill south-east of Bethlehem known as the " Frank Mountain " (Jebel Fureidis) ? This latter is undoubtedly one of Herod's desert castles and would repay excavation and conservation.

ROMAN :

When the emperor Hadrian revived Jerusalem it grew on different lines, regardless of the ancient landmarks for the most part. No doubt it spread outwards from the legionary barracks on the western hill. It still retains much of its Roman lay-out, both in its streets and walls, and also, as we have discovered, it still uses one of the Roman sewers.

[1] See *Quarterly Statement*, 1892, pp. 115–120 ; 1901, pp. 397–402.

At a point west of the south-west corner of the Haram, not far from the " Wailing Wall " and " Robinson's arch " (at (III) on fig. 3), a blockage was reported owing to the dislodging of several cover stones, said to be unusually large. This was in 1941, when timber could not be spared for casing a shaft or gallery to reach the threatened point, therefore a large open excavation was made, over 20 feet

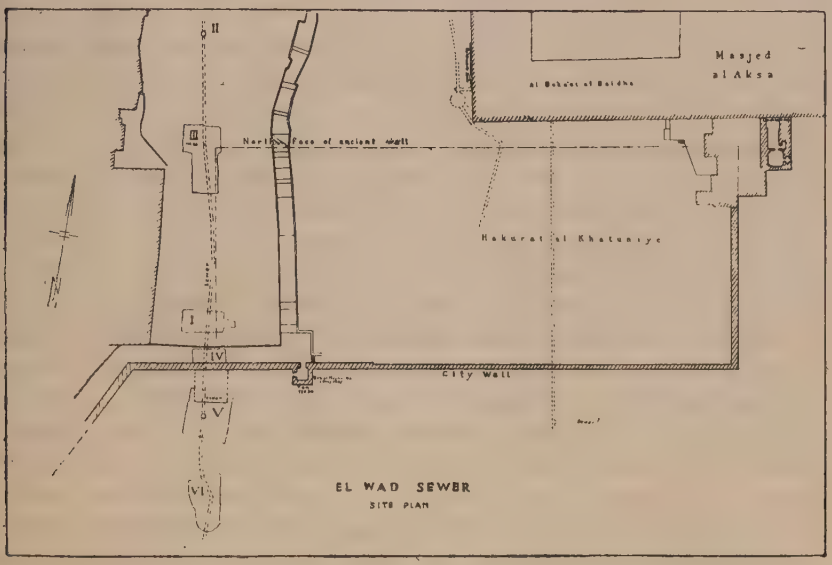

FIG. 3

PLAN SHOWING SOUTH-EASTERN PART OF THE OLD CITY OF JERUSALEM WITH COURSE OF ROMAN DRAIN, FROM (II) TO (VI). THE STREET PAVING WAS FOUND IN II, III, V AND VI, UP TO 9 METRES WIDE. THE TOWER BUILT ACROSS IT AT (V) MAY BE ARAB OR CRUSADER

deep. So was it revealed that the dislodged cover stones were in fact the flagstones of a Roman Street to which the sewer originally belonged. It was a wide, well-paved street running north and south with the sewer about its centre (Pl. V, 1). A small coin of late Hellenistic type and some Roman sherds were found on lifting one of the paving stones.

Thus the street may have formed part of the eastern of the two diverging north-to-south streets appearing on the 6th-century mosaic map at Madaba church in Trans-Jordan (L.-H. Vincent and F.-M. Abel, " Jérusalem Nouvelle ", album, Pl. XXX). Both streets are followed at a higher level by the two modern streets which fork not far inside the northern gate, Damascus Gate, the one running alongside the Haram[1], the other towards the Church of the Holy Sepulchre (Fig. 2, as has been proved by the discovery of a similar paved street all the way from the fork to the south end of Khan ez-Zeit during reconstruction of the sewer there in the autumn of 1947).

The Roman eastern street was uncovered again just outside the city wall in front of the Dung Gate (Bab el Maghariba, at (V) and (VI), Fig. 3). Presumably it ran downhill towards the Pool of Siloam, following the fold between Ophel and the western hill, Mount Sion, that is to say, in the former Tyropœon Valley, and would have converged on the southern tip of the Ophel spur, possibly at the fork of a similar paved street discovered by Bliss and Dickie (" Excavations at Jerusalem ", pp. 143 ff. and J3 on plan No. II, though the western arm was only 10 feet wide there). If so, it would have been joined there by another descending street which ran along the ridge of Ophel, doubtless on much the same line as the later Roman street discovered at the north end of the ridge by Mr. Crowfoot and Mr. FitzGerald (*Palestine Exploration Fund Annual* V, 1927 pp. 37 ff.).

Owing to the successive stages of rebuilding alongside the portion of the street opened inside the " Dung Gate ", at only one point was it possible to identify a contemporary structure. This was on the east side (Fig. 2), an angle of a massive building constructed of large boss-and-margin blocks, obviously re-used since they were all damaged somewhere, at the edges or at the corners (Pl. V, 1 and 2). Similar blocks of the same unusual scale make up the lowest

[1] Buried paved streets have been found at two levels, see R. W. Hamilton, in *Quarterly of the Department of Antiquities*, vol. I, pp. 97ff., 105ff.

courses of the city wall to the east of the " Dung Gate " (Pl. V, 3), and this unusually long straight stretch of the city wall running as far as the angle south of the Haram and returning thence to the Haram wall at the Aqsa mosque, runs at right angles to the line of the street and then returns towards the Haram parallel with the street (Fig. 3). Hence I suggest that these two arms of the city wall give two sides of a great enclosure which should be completed by joining their ends to the angle which we found alongside the Roman street inside the walls. Its length would be nearly 200 yards (181 metres outside measurement). Was this the Roman stadium which is mentioned in the Paschal chronicle, an account of Jerusalem in the 2nd or 3rd century A.D.?

Outside Jerusalem, Roman or Early Christian remains are our most frequent discoveries, and I can give examples only. At the beginning of the war, but really as the outcome of the Arab rebellion, a widespread series of police posts were erected in the towns and along the main roads. Some of the sites chosen were almost the same as those of Roman or Crusader places which must have served much the same purpose. Perhaps the most striking example was at Lajjun, near Megiddo. The name Lajjun, which it is generally agreed comes from the Latin " *legio* " or " legion ", now applies to a village situated near the famous pass. But the new police post commanding the cross roads at the mouth of the pass proves to be on the Roman site, not of the Roman fort perhaps but of the settlement below it. Incidentally a coin of Londinium was found here, of nearly the same period as the Peutinger map where the cross roads is shown as Caparcotnei. Later, in a neighbouring valley to the north of Megiddo, a Roman altar was reported and acquired for the Museum. It was erected by a " primipilus " or chief centurion of the 6th legion, Ferrata (see *Quarterly of the Department of Antiquities in Palestine*, vol. XII, pp. 89-91).

Again at Latrun, where the Jaffa road begins to enter the Judean hills, one of the new police posts was planted on a small hill near 'Amwas where epitaphs of soldiers of the 5th legion, Macedonica, have been found, and opposite another small hill where ruins of a Crusader fort exist.

At Nablus, itself a town of Roman foundation, the new government building lies outside the town to the south, near the site of the ancient Shechem, but on a site which proved to be part of a late Roman suburb. Nablus itself still retains its Roman plan of straight streets intersecting at right angles, very different from the winding streets of most Arab towns ; but the present level is at least 15 feet higher than the Roman. So close is the alignment of the present streets to the ancient that when foundation shafts were being sunk last year for a new building at a street corner just outside the built-up area, at the very corner a marble column shaft was found some 15 feet down. It was inscribed in Greek " To the (God) Apollo " and almost certainly came from one of the ancient street colonnades. To the east and west of Nablus where the Moslem cemeteries are, the Roman cemeteries lay, as recent discoveries have proved. At the east, beside the main road, when foundation shafts for a new mosque were being sunk, Roman tombstones appeared at the bottom ; one is carved with the figure of a mounted man and commemorates a trooper of the Moorish cavalry, by name Augindai. (See *Quarterly of the Department of Antiquities in Palestine*, vol. XII, pp. 93-94).

Christian and Moslem :

Passing to the Early Christian or Byzantine period, our discoveries are so frequent that I can illustrate only one, *i.e.*, the mosaic pavement of a small church found on a farm near Beit Jibrin in the foothills west of Hebron[1]. The central panel looks like a picture of Jonah's boat attacked by the great leviathan (Pl. VI, 1) ; the surrounding panels had animals, all damaged. Only the lion (Pl. VI, 2) survives in another part of the floor.

Another Early Christian discovery that I must not omit to mention is of a Byzantine monastery commemorating the fast of St. John in the Wilderness. Early tradition placed

[1] See Kirk, " Recent Archæological Activities " in *P.E.Q.*, July-Oct,. 1946, pp. 97–8.

this, not at 'Ein Karim west of Jerusalem, but in a lovely if remote valley to the west of Hebron, near Taffuh on the old road to Gaza. The ruins were somehow missed by the Palestine Exploration Fund Survey Party, for they are not listed in the " Survey of Western Palestine ". They were rediscovered by a German scholar, the Rev. Dr. Clemens Kopp, who had been studying the narratives of the medieval pilgrims ; he walked out to the place they indicated and, to his delight, found the ruined chapel and baptistry, and on the hill above, a monastic cell or watch tower with the lintel, carved with the cross flanked with alpha and omega, still above the entrance doorway. Both sites have been excavated by the Dominicans and described by Père de Vaux in the *Revue Biblique*, vol. LIII (1946), pp. 554 ff. A spring traditionally known as 'Ein el Ma'mudiyya, " spring of the place of baptism ", once more fills the ancient baptistry. I should add that the Franciscans have been working at 'Ein Karim and have established the Early Christian origin of their church in the village there, for it is here that tradition places the birth of the Baptist. Their work here has been described at length by Father Sylvester J. Saller in a volume printed at their press in Jerusalem.

Discoveries at St. John's, 'Ein Karim, 1941-2.

The Dominican Père de Vaux, director of the French School, was responsible also for some interesting excavations alongside the Crusader church at Abu Ghosh (Qiryat el 'Enab) on the Jerusalem-Jaffa road, in the grounds of the Benedictine monastery whose members now tend the church. Here an Arab khan or inn was unearthed, which latter became part of a Crusader hospice. Most surprisingly, Père de Vaux infers that the Crusader church itself was built in a Roman reservoir, once filled, he thinks, by the spring which now wells up in the crypt of the church. In the church wall there is an inscription by a detachment of the 10th legion, Fretensis, the legion which garrisoned Palestine after the fall of Jerusalem to Titus, and this tablet, Père de Vaux suggests, may well be in its original position, celebrating the

work of that legion in building the reservoir (see his report in *Revue Biblique*, vol. LIII (1946), pp. 125 ff.).

MOSLEM :

Of the Department's own excavations in the Early Moslem ruins, Kh. el Mafjar, near Jericho, doubtless the site of a residence belonging to a caliph of the 'Umayyad dynasty early in the 8th century A.D., you will already have heard from Dr. Mayer. We are now concentrating on the northern building, which was evidently a stately bathing establishment. It was in working round the outside of this building that we came upon the fine mosaic pavement which was illustrated in Mr. Kirk's article (*P.E.Q.* July-Oct. 1946, Pls. IV, V). This scene is composed in delicate, almost natural tints of carefully graded stones ; the animals are in cream, fawn and brown, the tree is in three receding planes created by the use of two shades of green, one yellowish, the other bluish, with deep blue-grey for the shadows. The technique is Byzantine at its best, comparable to the mosaic paving of the Great Palace of Constantinople (see the coloured reproductions in the report on the excavations carried out on behalf of the Walker Trust (University of St. Andrews), *The Great Palace of the Byzantine Emperors*, chap. III). But the realism of the picture is rather Sassanian or Persian. We find that the room containing this pavement adjoined the hot rooms.

The carved stucco which is to be seen on the circular wall around the pavement once continued right up to the vault and into the dome which lit the room, a dome of Byzantine skull-cap form on a high drum pierced with windows. The photograph on Pl. V of Mr. Kirk's article shows the stucco decoration of the skull-cap seen upside down, as reconstructed from the fallen fragments ; the heads are alternately male and female, and the florid foliage is typical of the carved stucco found in both blocks of the palace (see *Quarterly of the Department of Antiquities in Palestine*, vol. XIII, pp. 1 ff.). Some of the windows have been reconstructed similarly and can be related to the dome. Unlike the residential block

to the south, these baths were entirely roofed over ; the scheme should emerge in the course of the coming season's work, but already it seems probable that it resembled a domed Byzantine church of the period.

At the same time the piecing together of balustrades of carved plaster from the galleries of the residential courtyard has gone on. Over thirty different patterns have lately been illustrated in the *Quarterly of the Department of Antiquities in Palestine*, vol. XIII, pp. 1-58. They have either endless repeating patterns consisting of stylized foliage on a geometrical basis of interlacing work, or else a central medallion of such work surrounded by free foliage. The design as well as most of its elements seem to derive from the Græco-Roman tradition of Syria, but some features are distinctly Sassanian, while the technique is altogether Mesopotamian, since plaster carving is unknown in Syria prior to the Moslem conquest. There are close parallels with the stucco decoration of another 'Umayyad palace of Syria, Qasr el Heir between Damascus and Palmyra, which has been excavated by the French and proves to be of the reign of the Caliph Hisham, 724-743 A.D. (see reports in *Syria* 1927, pp. 302-329, 1931 pp. 316-318, 1934 pp. 24-32, 1939 pp. 195–373). These panels are indeed a revelation of that kind of intricate and elaborate pattern made of floral elements on a geometrical ground which Islam has made its own, as we acknowledge by calling it arabesque.

Here it is seen in the freshness of its beginning, and is to be compared with similar carvings perhaps almost as early, but in wood, which have been taken down from the roof of the Aqsa Mosque in Jerusalem during its recent rebuilding. Used as wall plates for the great rafters of the nave (Pl. VII), they were first recognized and photographed by Professor Creswell of Cairo (see his *Early Muslim Architecture*, vol. II, pp. 127-137 by G. Marçais). Now they have been treated in the Department's laboratories to remove a thick coating of modern paint, and will be exhibited partly in the Haram Museum and partly in the Palestine Archæological Museum in Jerusalem.

In the course of the present reconstruction, by no means the first that the Aqsa Mosque has undergone, much new information has come to light, and it is now possible to identify and date the earlier phases of the building. Contrary to the frequent assumption that it was built upon the ruins of a church, it has become clear that it was not, although its structure contained much re-used materials from one or other of the early churches of Jerusalem. This appears not only in the masonry, but also in some of the timber re-used in the roof, *e.g.*, the carved strip shown in Pl. VII, 1, which is to be compared with the architraves still in position in Justinian's Church of the Nativity at Bethlehem (Vincent and Abel, *Bethléem*, Pl. XIII), as well as with the early 'Umayyad plaster carving from Kh. el Mafjar. Another plank from the roof bears part of a Greek inscription recording the foundation of a church by a Patriarch of Jerusalem in Justinian's time (*Quarterly of the Department of Antiquities in Palestine*, vol. X pp. 162-165). For all this I must refer you to a memoir by Mr. R. W. Hamilton, which it is hoped to publish soon.

I conclude this mixed bag by illustrating some discoveries of Crusader date which have been made in the church of the Nativity at Bethlehem. For Christmas 1944 the crypt or grotto was cleaned for the first time for many years and in removing the accumulated soot from the half dome over the Altar of the Star we disclosed a charming if mutilated mosaic of the Christmas scene, done in the Byzantine style but under Crusader auspices, as the Latin inscription proves (Pl. VIII, 1). Then last year, encouraged by Professor Boase, then of the Courtauld Institute, we cleaned the Crusader paintings on the marble pillars of the nave colonnades. They form a series remarkable for the fact that it combines the figures of saints distinctive of both Europe and the East, with inscriptions in both Latin and Greek. Thus St. George and the Desert Fathers are represented as well as Pope Leo the Great, the Irish bishop of Taranto, St. Catald, and the kings Canute of Denmark and England and Olaf of Norway, both of whom were saints of the Church. One of the paint-

FIG. 1

KH. EL KARAK, DETAIL OF EARLY BRONZE AGE BUILDING AT NORTH END OF MOUND SHOWING CIRCULAR EMPLACEMENT

FIG. 2

NAHARIYA, NORTH OF ACRE, SHOWING RUINS OF CANAANITE TEMPLE

FIG. 1

PHŒNICIAN URNS FROM ER-REGEISH NEAR DEIR EL BALAH ; OF BURNISHED RED OR BUFF WARE, ONE PAINTED WITH BLACK BANDS

FIG. 2

CYPRO-PHŒNICIAN POTTERY FROM EZ-ZIB, NORTH OF ACRE ; LUSTROUS RED WARE PAINTED IN BLACK

FIG. 1

TYPICAL ROCK-CUT TOMB SHAFT AT EZ-ZIB

FIG. 2

POTTERY FIGURINE FROM EZ-ZIB

FIG. 1

FRONT OF THE MIDDLE ANCIENT TOWER IN THE CITADEL COURTYARD, JERUSALEM

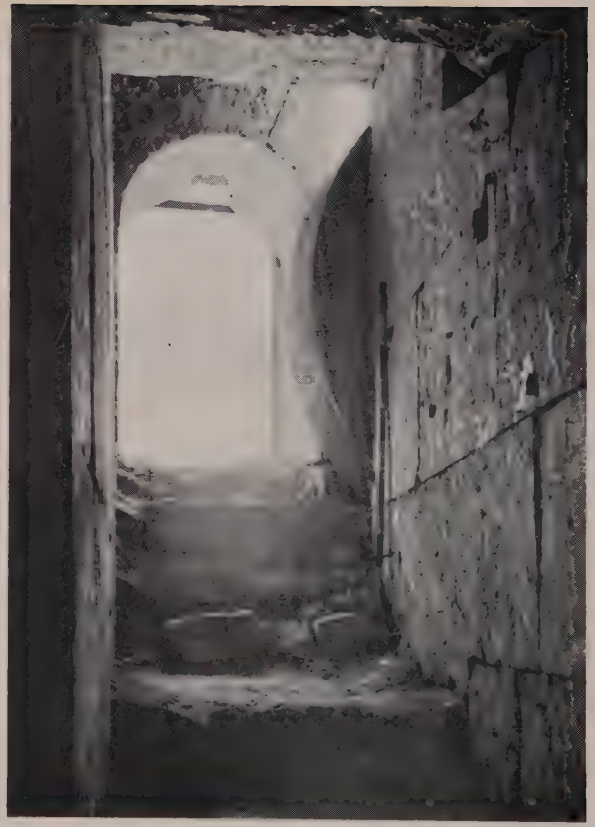

FIG. 2

"TOMB OF HEROD'S WIFE," JERUSALEM; ROLLING STONE AT ENTRANCE FROM THE INSIDE

FIG. 1

ROMAN STREET UNCOVERED WEST OF SOUTH-WEST ANGLE OF THE HARAM, JERUSALEM ; LOOKING EAST, THE SEWER IN FRONT

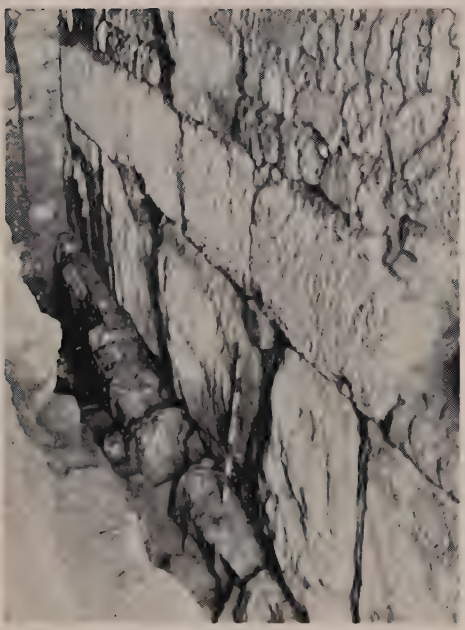

FIG. 2

INSIDE THE VAULT SEEN IN FIG. 1, LARGE MASONRY EXTENDING FROM CORNER BESIDE STREET

FIG. 3

THE SOUTHERN WALL LOOKING TOWARDS DUNG GATE (BAB EL MAGHARIBA), WITH RE-USED BLOCKS IN LOWER COURSES, CF.

FIG. 1
MOSAIC PAVEMENT OF EARLY CHRISTIAN CHURCH NEAR BEIT JIBRIN

FIG. 2
DETAIL FROM THE SAME CHURCH

FIG. 1

EARLY CHRISTIAN WOOD-CARVING FOUND RE-USED IN THE ROOF OF THE AQSA MOSQUE, JERUSALEM, WITH EARLY MUSLIM PANEL AT RIGHT

FIGS. 2 AND 3

OTHER EARLY MUSLIM PANELS FROM THE SAME

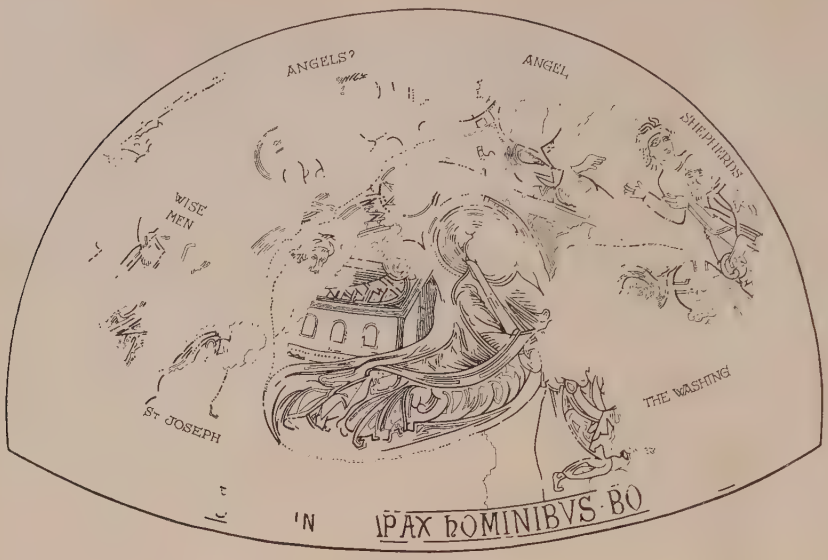

FIG. 1

MOSAIC IN SEMI-DOME ABOVE THE ALTAR OF THE STAR AT THE CHURCH OF THE NATIVITY, BETHLEHEM

FIG. 2

PAINTINGS IN SOUTH AISLE OF THE CHURCH

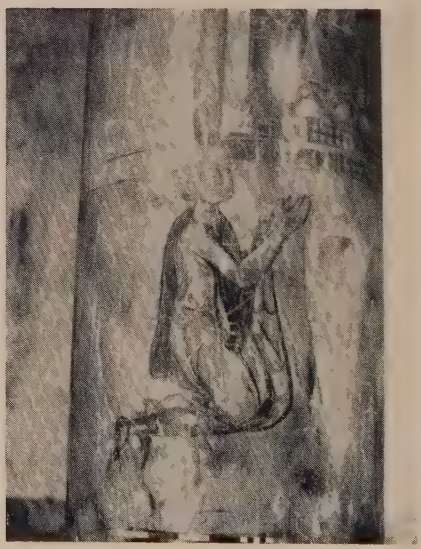

FIG. 3

FIGURE AT LOWER LEFT-HAND CORNER OF THE PAINTING OF THE MADONNA, FIG. 2

ings, a Madonna, was found to be dated in Latin, apparently 1130 of the Incarnation (Pl. VIII, 2, the date written MCTR); another has a prayer in Greek. The former, like some of the other subjects has supporting figures (Pl. VIII, 3), probably representing the donors who, we may imagine, gave the pictures as a thank-offering for a pilgrimage safely accomplished.[1]

Of the discoveries I have alluded to in this rapid review of several years' work, it is to be noted that many were incidental to works of construction or restoration, such as we must expect in a country that is developing as fast as modern Palestine is. I need hardly stress then that it is more than ever necessary that there should be a permanent archæological institution of the character of the Department of Antiquities in Jerusalem, to hold a watching brief as it were, to investigate what the builder or engineer turns up and sometimes to arrange that an important site is to be examined before it is built over. At the same time, I am glad to say that local interest in the antiquities of the country shows signs of growing, and that this year both Arabs and Jews have organised congresses that gave serious attention to the history and archæology of the region and were keenly attended.

[1] For other illustrations and a list of subjects, see " Guide to the Church of the Nativity, Bethlehem," by R. W. Hamilton, 2nd ed., Department of Antiquities, Jerusalem, 1947; correcting some of the identifications given by Vincent and Abel, *Bethléem*, Paris, 1914.

NEW LIGHT ON THE NEGEV IN ANCIENT TIMES*

By Naphtali Lewis

Ten years ago Auja el-Hafir was an insignificant spot on the map of the southern desert—known, to be sure, to specialists in Palestinian archæology, but regarded by them, since 1914 at least, as one of the less promising excavation sites of the region. In the first two months of that year two young British archæologists, C. Leonard Woolley and T. E. Lawrence, made a rapid archæological survey of the Negev ; and in their account of their findings, published under the title *The Wilderness of Zin*, they reported that the comparatively " imposing ruin " of the nineteenth century—even as late as 1909 there were still visible two parallel streets, 600 feet long or more, with the masonry bases of their colonnades—had shared the fate of so many other ancient sites : it had been demolished to provide building materials for modern construction[1].

It was due to chance, therefore, that Auja was excavated early in 1936. Earlier that winter an expedition sponsored jointly by New York University and the British School at

* A paper read, under the title " The Roman-Arab Frontier in the Light of Recent Discoveries ", at the annual meeting of the American Historical Association, December 30th, 1946. This paper is based on the as yet mostly unpublished work of Mr. H. D. Colt and others on the archæological materials ; Professor C. B. Welles, of Yale University on the Greek inscriptions ; Professors E. L. Hettich and L. Casson of New York University, on the Greek and Latin literary papyri ; Sir Harold Bell on the *entagia* of the Arab period ; and Professor C. J. Kraemer, of New York University, and the writer on the remaining non-literary Greek papyri found in the excavation of Auja el-Hafir in 1936. The writer, of course, assumes responsibility for the preliminary conclusions here drawn from these materials.

[1] Woolley and Lawrence, *The Wilderness of Zin*, 133.

Jerusalem, and led by Mr. H. D. Colt of New York, set out to continue its excavation of the much more promising site of Sbeitah (ancient Sobata) about ten miles to the east. The excavation had only fairly gotten under way when the supply of drinking water gave out. Rather than disband the expedition without having accomplished anything, Mr. Colt decided to move over to Auja, where one of the four ancient wells had been cleared and was functioning. And so it was that the " despised and rejected " Auja yielded a harvest that amazed and delighted the scholarly world—large quantities of pottery, glass and coins ; inscriptions, ostraca and stamped amphora handles ; but above all papyri, which were turned up almost with the first blow of the spade. The papyri, of which there are nearly a hundred and fifty pieces sufficiently preserved to deserve publication[2], and innumerable fragments, acquire a special importance from the fact that they are the only body of papyri found in Palestine, and, together with those from Dura-Europus, the only papyri found outside of Egypt. Most of the papyri are Greek, but there are also some Arabic, Syriac and—surprisingly enough for this corner of the world—Latin pieces.

The papyri and the majority of the other finds date from the 6th and 7th centuries A.D., the period of greatest prosperity in the southern desert. However, the finds contain evidence of a settlement at Auja at least as early as the second century B.C., and they enable us to trace its history, if only sketchily, for nearly a thousand years thereafter. This history is important not so much because it tells us of a hitherto unknown village of Nestana (or Nessana, as it was

[2] A few pieces of special interest have received advance publication : cf. M. Schwabe, *Magnes Anniversary Book* (Jerusalem, 1938), 224–235 (in Hebrew, English summary, p. xxx) ; C. J. Kraemer, Jr., and N. Lewis, *Trans. Amer. Philol. Assn.* 69 (1938), 117–133 (cf. U. Wilcken, *Archiv. für Papyrusforschung* 14 [1941], 179–180 ; A. Steinwenter, *Zeitschr. der Savigny-Stiftung, Rom. Abt.* 63 [1943], 415–430) ; H. I. Bell, *Proc. Amer. Philos. Soc.* 89 [1945], 531–542. Mr. Colt's earlier excavation at Sbeitah had yielded four Greek ostraca of the sixth century, which were published by H. C. Youtie in the *American Journal of Archæology* 40 (1936), 452–459.

called in Greek), but rather because the history of this village clearly reflects the history of the whole Negev region.

Auja lies in the Wadi el-Hafir just off the main road from Beersheba, about twenty miles above the point where the age-old road divides, the right fork proceeding westward through the Sinai peninsula to Egypt, the left running southward to Aqabah (ancient Aila), at the head of the Eleanitic Gulf of the Red Sea. A hill rising sharply from the wadi, or valley, at this point affords an excellent situation for a citadel commanding the road. Nessana, therefore, was able to serve the double function of a garrison post guarding the trade route and of a way station for traders using the route.

The earliest evidence unearthed at Auja takes us back, as I have said, to the second or possibly late third century B.C. At that time the settlement consisted of a small fort on the crown of the hill. The fort was a squarish structure, with circular corner towers (presumably four in number; remains of two are still discernible), and enclosing that sine-qua-non of desert existence—a well. Certain details of its construction are unique in this region, suggesting that the fort may have been established as a garrison post by the Ptolemies or the Seleucids rather than by the local Nabataeans. Stamped amphora handles dating from this period indicate that some, if not all, of the wine and oil consumed by the inhabitants was imported, and confirm the impression that Nessana was at this time a small outpost and not self-sustaining.

Seleucid control in the Negev came to an end with the rise of the semi-independent Maccabean state in Palestine about the middle of the second century B.C. Two Jewish coins found in the excavation attest the Maccabean influence in the region, which lasted until perhaps the beginning of the first century B.C. But already in the second century the Nabataeans were expanding westward and northward from their capital at Petra, and by the time of Pompey's occupation and reorganization of Judaea (63 B.C.) the Negev and Trans-

jordan were both firmly under Nabataean control.[3] The character and size of Nessana seem to have changed little in this period ; amphora handles and large numbers of jars of this time show that the community continued to import its wine and oil.

The Nabataean control of the Negev continued until 106 A.D., when Trajan annexed the province of Arabia to the Roman Empire. Strabo (time of Augustus) speaks of merchandise " carried from Leuke Kome to Petra, thence to Rhinocolura . . . and thence to the other nations ".[4] No doubt the bulk of the Nabataeans' trade followed this ancient route which passed by their capital, Petra ; but a considerable volume of trade must unquestionably have continued to follow the route passing through Nessana, which, branching off from the main road at Aila, afforded a short cut to Gaza and Rhinocolura (modern el Arish). This conclusion is supported by the Nessana finds belonging to this period. These include six Nabataean coins, large quantities of Nabataean pottery, *terra sigillata*, and glassware imported from Alexandria and Syria. But most interesting, perhaps, are two unpretentious-looking stones about the size of a man's fist : these contain some rather blurred writing which has not yet been deciphered but which is unquestionably Nabataean ; and on one of the stones, which seems to contain a list of articles or names, Professor C. C. Torrey of Yale University thinks it possible to make out the word Nestana. If this is substantiated in the final reading, it will constitute our earliest evidence of the name of the village.

I may conclude for the Nabataean period by quoting a glimpse of the role of way-stations like Nessana in the trade of the region, which is given by the Elder Pliny. " Frankincense can not be exported (from Arabia) ", he writes, " except through the land of the Gebanites, and so a tax is paid to their king too. From Thomna, their capital, to

[3] Cf. U. Kahrstedt, *Syrische Territorien in hellenistischer Zeit* (*Abhandlungen der Gesellschaft der Wissenschaften zu Göttingen, Phil.-Hist. Kl., Neue Folge*, XIX, 2), 86–88.

[4] Strabo, *Geogr.* 16, 4, 24.

Gaza is . . . 65 camel stages . . . All along the road there are expenses, here for water, there for food or lodging at the halts and various tolls, so that the expenditure for each camel load is 688 *denarii* as far as the Mediterranean, and then another tax is paid to the publicans of the Roman empire ".[5]

With the Roman annexation of the province of Arabia, the whole region served by the Nessana road suffered a sharp recession which lasted nearly three hundred years, for in the last years of Trajan's reign (111-114 A.D.) the road that led past Petra was rebuilt on Roman lines and extended northward through Transjordan to Bostra, the capital of the new province, and to Damascus, whence there was ready access to the Syrian ports. Thus by-passed by the change in the orientation of the desert traffic, the region around Nessana became an insignificant backwater off the beaten track. This sharp decline in prosperity is strikingly mirrored in the Nessana finds, which for this period consist of a few stray coins and insignificant bits of glass. Few as they are, however, these finds nevertheless indicate that the site was not completely abandoned.

From this slough of insignificance, Nessana, together with the rest of Negev, suddenly arose in the Byzantine era to importance and prosperity far exceeding that of any earlier period. This resurrection was due, however, to military rather than to commercial considerations. The threat of the roving Bedouins to the Roman territory was now increasing, and the Emperor at Constantinople—perhaps Theodosius the Great, as we shall see in a moment—decided to build an additional chain of defences across the southern desert. The settlement of large numbers of troops in the new frontier posts had, in turn, a salutary economic effect on the region.

The citadel at Nessana was, naturally enough chosen as one of the links in the new chain of defences. The remains of the old fort were demolished and a much larger fort, 2,800 square metres in area, was built in its place. One of the papyri tells us that the men of the Nessana garrison belonged

[5] Pliny, *Nat. Hist.* 12, 14, 63–65.

to a Theodosian *numerus*, i.e., to a unit created in the reign of Theodosius. Now it is just possible, of course, that the fort was built some time later and manned from a Theodosian *numerus*, created earlier and originally stationed elsewhere ; but in view of the military situation indicated above, the probability is that this *numerus* was created to man the new fort, and that the construction of the fort and of the chain to which it belonged is therefore to be assigned to the reign of Theodosius the Great (379-395). This conclusion derives added support from the large number of Byzantine coins found at the site, which also point to the second half of the fourth century as the time of Nessana's rise to importance.[6]

Interestingly enough, not a single military implement was found in the excavation of the fort ; objects of industry, on the other hand, were numerous. This circumstance, surprising at first sight, is in part perhaps the result of the Arab conquest, which ended the military career of Nessana's inhabitants (see below). But it is also thoroughly in keeping with what we know about the frontier posts of the Byzantine Empire : the *limitanei*, or frontier troops, who manned these *castella* were not soldiers on active duty living in barracks, but military settlers living in their own homes near the fort ; they normally spent their time cultivating their hereditary allotments of land, but at the same time they were on hand ready for instant mobilisation in case of need[7]. The large new fort, it is clear, was intended not as a residence for the garrison, but as a place of refuge for the men and their families in case of danger. A large well, twelve feet in

[6] G. E. Kirk, *Pal. Exp. Quart.* 73 (1941), 64, places the high point of prosperity for the neighbouring town of Khalasa (ancient Elusa) in the third-fourth centuries, with the decline beginning thereafter. This can hardly be right, and indeed Kirk himself cites evidence immediately afterwards (cf. also 66) which challenges this view. The Nessana evidence, especially the sixth-seventh century papyri, make it quite clear that the heyday of this region began about 400 and ended about 700 A.D. Elusa, which was the district capital in the Byzantine and early Arab periods, can hardly have been an exception.

[7] Cf., *e.g.*, C. Diehl and G. Marçais, *Le monde oriental de* 395 *à* 1081, pp. 76, 223.

diameter, was sunk straight through the solid rock on which the fort was built, to assure a supply of water in case of siege.

It is for this period of Nessana's renascence and florescence, naturally, that the finds are most abundant ; it is to this period that the Latin and most of the Greek papyri belong. Together, the papyrological and archæological evidence permit us to reconstruct a fairly detailed picture of life in this frontier region of the Byzantine Empire. The basis of life was, of course, agriculture. The military settlers of Nessana cultivated their valley and the hillsides of the vicinity. The usual crops were grown, wheat and barley and legumes ; grape vines did very well in this soil, and there is mention of figs and dates, for which Palestine was famous. A traveller eyeing the barren wastes of the present-day Negev usually finds it hard to believe that agriculture once flourished here ; indeed, it was nearly forty years ago that Professor Ellsworth Huntington advanced his now famous theory, in which he argued that the flourishing state of agriculture in the Palestinian desert in Byzantine times was made possible by the occurrence for a few centuries of greater amounts and longer periods of rainfall than the region now enjoys.[8] This hypothesis has since been frequently challenged, among others by Woolley and Lawrence,[9] and the Nessana papyri now add the weight of their evidence against it. The theory is at best not susceptible of demonstrable proof, and the assumption of such a climatological change is actually quite unnecessary. The papyri make it abundantly clear that the agriculture of the Negev was not of the dry farming type, but was carried on by the methods characteristic of the ancient Near East—by means of irrigation ; and the numerous wells and subterranean cisterns of Byzantine date still

[8] *Palestine and its Transformation* (Boston, 1911). A convenient brief summary of this climatological controversy is given by Kirk, *loc. cit.*, 68, who, though rejecting the idea that " the rainfall was considerably greater than today ", seems ready to postulate " a slight increase in the average winter's rainfall ", which " would have its greatest effect in marginal lands like the Negev ".

[9] *Op. cit.*, 51–55.

visible (and in some cases, still used) throughout the Negev show us how the inhabitants of the region stored and husbanded the brief but heavy rains of the late winter.[10] It must not be automatically assumed, moreover, that this expansion of agriculture in the Byzantine period was such as to enable the farmers of the Negev to become self-supporting ; the papyri seem to indicate, on the contrary, that the stipend paid the *limitanei*—unless we are to regard it as deriving entirely from local taxation—played an important part in sustaining their life in the desert

While the most important, agriculture was not the only economic activity of the people of Nessana. Large numbers of spindle whorls and loom weights testify to the existence of not inconsiderable local textile activity. From the papyri we learn that the community boasted at least one potter and a goldsmith. With the influx of the new settlers, commerce in the region was also revived. Being far from self-sufficient, the new military settlements had to supplement local production, both agricultural and industrial, by imports : one papyrus, for example, deals with a shipment of fish to Nessana.

The resumption of active caravan trade along the highroad passing Nessana is rather strikingly brought out by a papyrus which records a division of a dead soldier's property among his heirs, one of whom receives " a house with ninety-six beds ", which can hardly be anything but a *khan*, or caravanserai. This hostelry had, moreover, another kind of traffic to which it could cater, for the road through Nessana assumed an added function in this period : it was the Pilgrim's Way to Sinai, and Nessana, the last important *stathmos* before the road to " the Holy Mount " entered the wilderness, did a considerable business in lodging the pilgrim parties and providing them with native guides to lead them to the shrine.

Nessana and its neighbours were, of course, Christian communities at this time, and the Church figures prominently

[10] In at least one place (Wadi Qadirat, ca. 15 miles from Auja) there is also a good perennial spring : cf. Kirk, *loc. cit.*, 70.

in our finds. Not long after the construction of the new fort, a large church, dedicated to Sts. Sergius and Bacchus, was built on the acropolis up against the north wall of the fort. A passageway connected the fort with this "holy church of the camp," as it is sometimes referred to in the papyri. The size of this church and its elaborate decorations, which included the use of imported marbles, indicate that the community of Nessana had already acquired considerable wealth at the time of its construction. Some time later another church was built on the south brow of the hill. These churches apparently acted as the local archives, for it was in them that the papyri were found. The church officers lived a thoroughly secular life. "Bishops became professed politicians," wrote Woolley and Lawrence, " . . . and piety fled to the wilderness"[11]. Our papyri are eloquent on this subject. The chief money-lender and probably the richest man in town was one Patrick, the presbyter of Sts. Sergius and Bacchus, and in one contract, at least, we find him charging more than the legal rate of interest! The church, too, apparently amassed considerable wealth in its own right. We have several long accounts of donations of both money and grain received by the church. The donors on these lists are not only people of Nessana and the surrounding communities; some of them come from towns fifty miles distant and more. It may be thought from this that the church at Nessana had become an important regional shrine, but a likelier explanation is that these donors were pilgrims on their way to or returning from Mt. Sinai. We suspect, moreover, that Patrick and his associates and successors in office kept the furnishing of the guides to Sinai in their hands and derived a considerable revenue in this way.

The papyri give us, finally, glimpses of the military life and organization of the Nessana post. There was, presumably, a commanding officer, but we do not know his rank. The highest officers mentioned in the papyri are two *primicerii;* under them came *priores*, *duciani* and *cursores*.

[11] *Op. cit.*, 50.

The exact number of men in the garrison at any time is unknown, but we know that the garrison was divided into *decuriae* (of which at least eight are attested), and that it was (or contained) a camel corps which, at some point in the sixth century, possessed thirty-four camels and thirty dromedaries. An interesting sidelight on the intimate connection between the military and the religious administrations of Nessana is provided by the assignment of one camel and one dromedary to " the holy church of the camp." In addition to their stipends, which they received in money, the men also received periodic distributions of fodder for their animals.

What did the inhabitants of Nessana—that is the literate members of the community—read ? Chiefly, of course, religious works. The excavation turned up several pages from the Acts of St. George, fragments of two separate codices of the Fourth Gospel, a portion of Paul's Epistle to Titus, a portion of the apocryphal letter of Abgar to Jesus, and a fragment of the Περὶ Πίστεως commonly ascribed to the ante-Nicene St. Gregory Thaumaturgus. In addition we have many fragments of unidentified theological or liturgical texts, and remnants of a religious work written in Syriac. There is nothing surprising in all this. What is surprising is that in the sixth and seventh centuries they read Vergil out there in the desert. The Nessana find contains complete folios or fragments representing about 100 pages from a Latin-Greek lexicon to Vergil, and also about 20 pages from a separate codex of the Latin text. These presumably belonged to the library of the church or of one of the clerics, and they suggest that a certain amount of Latin teaching may have been carried on in Nessana. The presence of Vergil manuscripts in this frontier post is all the more surprising in view of the complete absence of Greek secular writings ; this circumstance may be fortuitous, but even so we are left with the rather striking fact that Vergil is the only secular author of antiquity whose writings were found at Auja.

In 634 A.D. the Negev passed under Arab domination. A considerable number of the documentary papyri date

from after the conquest, and they afford invaluable contemporary evidence on the life of the Christian communities like Nessana in the first half-century of Arab rule. The picture that emerges is, as we should expect, quite similar to that which we have for this period from neighbouring areas and from other sources.

In Egypt, for example, the Christians enjoyed the status of a protected people. By the treaty of peace they engaged to pay a per capita tribute (*jizyah*) in exchange for Arab protection. For the Monophysite Copts, indeed, the conquest meant the end of the persecution to which they had been subjected by the Byzantine government ; thenceforth they and the Monothelite Melkites enjoyed equal toleration. Moreover, having no administrative machinery of their own, the Arabs preserved virtually unchanged that which they found in the country, even to the point of retaining the Roman titles for the various officials ; and the administration remained largely in the hands of Christians, who filled not only all the local and minor offices, but many of the higher ones as well : nearly a century after the Hegira, for example, a Christian still held the office of duke, and was referred to as " illustrious amir." It seems, finally, that in this first century of Arab rule the tax burden of the Christian population was actually somewhat lighter than it had been under the Byzantine emperors[12].

In Southern Palestine the coming of the Arabs brought similar conditions, as we can now see from the Nessana papyri. It is now abundantly clear that, though the Arab conquest removed the military *raison d'être* of the Negev fortresses, it did not automatically cause these settlements to disappear (as Woolley and Lawrence, for example, seem to have thought[13]). The papyri and inscriptions show that Nessana continued a relatively unchanged existence, at least to the very end of the seventh century. The Roman military

[12] This paragraph is based on A. J. Butler, *The Arab Conquest of Egypt*, cp. 28 ; Sir Harold Bell, *P. Lond.* IV, pp. 18–25, and *The Journal of Egyptian Archæology*, 31 (1945), 79–83 ; L. E. Browne, *The Eclipse of Christianity in Asia*, cp. 4–5.

[13] *Op. cit.*, 55.

garrison was of course disbanded[14], and an Arab garrison may have taken its place in the fort, for some fifty years after the conquest there is a mention of " the camp of Nessana "[15]. But the non-Arab inhabitants, though no longer soldiers, remained farmers and retained their lands. A particularly interesting document is an account of a planting at a place called Beraein[16], in which the following yields are recorded : grain, 6 1/4 to 7 1/5 times the quantity sown ; barley, 8 1/25 and 8 3/4 times ; aracus (a legume) ca. 3 1/4 times.

The Christian religion was not interfered with. The church of Sts. Sergius and Bacchus continued to exist and flourish, as several documents show. Pilgrims continued to visit Mr. Sinai, conducted, as before, by Arab guides ; indeed, prominent Arabs, too, began to make the pilgrimage, as attested, for example, by a letter from the Arab governor to an official of Nessana (doubtless a Christian), instructing him to provide a guide for such a visit. The church's continued prominence in the life of the Nessanites is attested also by a papyrus of 689 A.D. recording a presbyter's divorce, which Professor Kraemer and I published some years ago[17].

Of course, the Christians now had to pay a poll-tax[18] ;

[14] Cf. below on poll-tax.

[15] *P. Ness.* Inv. No. 9. It is just possible, of course, but on the whole far less likely that the expression is a survival from pre-conquest times. Another document (Inv. No. 10, Verso) is an account of *rizq*, the allowance of provisions made to the Arab soldiers ; but since this was a country-wide levy, its collection at Nessana would not necessarily be proof that troops were stationed there : cf. C. H. Becker, *Zeitschr. für Assyriologie* 20 (1907), 93 ; H. I. Bell, *P. Lond.* IV, 1335, 5n.

[16] No doubt=present-day Bir Birein, ca. 8 miles south of Auja, which is still a flowering spot in the desert : cf. Woolley and Lawrence, *op. cit.*, Pl. VIII and Map 1.

[17] Cf. above, note 1 ; Steinwenter, *loc. cit.*, interprets the proceedings as a *divortium in ecclesia.*

[18] The Nessana papyri use ἐπικεφάλαιον , the usual Greek word for poll-tax, at least in the Aegean area (cf. Liddell-Scott-Jones, s.v.). In Egypt, on the other hand, this word occurs only occasionally as a synonym of the more usual λαογραφία (cf., *e.g.*, S. L. Wallace, *Taxation in Egypt*, 411, note 70), and it is not attested after the fourth century (cf. Preisigke, *Wörterbuch*, s.v.) ; the poll-tax of the Arab period is called ἀνδρισμός,, διάγραφον or διαγραφή in the Egyptian papyri (cf. Bell, *P. Lond.* IV, p. xxv).

this apparently (as in Egypt) was not levied upon women[18], since it was paid in lieu of military service, which was not permitted to non-Arabs. In addition, the Christians continued, as they had under Byzantine rule, to pay requisitions for the troops. They were also required, as before, to render personal services of various kinds. Of especial interest among the numerous papyri dealing with tax matters is a group of seven orders (ἐντάγια) for provisions to be supplied by the people of Nessana for the years 674-677 A.D.; these have recently been published with exhaustive commentary by Sir Harold Bell[19]. Unfortunately, the extant data are not sufficiently extensive or detailed for any comparison of the relative burden of taxation before and after the Arab conquest, but in view of the overall similarity already alluded to, it is likely that in this respect too conditions in Palestine were not very different from those prevailing in Egypt at that time. One document which deserves special mention in this connection tells of a delegation of twenty men from several towns and villages of the southern desert, which journeyed to Gaza to protest about taxes before the Governor, who had granted them an audience for the purpose. This combination of protesting taxpayers and a Governor ready to hear their appeal in person is strikingly reminiscent of contemporary conditions in Egypt, where conscientious and equitable Governors were under constant pressure from the Caliph to extract from the subject population more than the stipulated taxes[20].

The papyri show us, finally, how here as in Egypt, the Arabs took over and continued the Byzantine administrative

[18A] Cf. Bell, *ibid.*; Brown, *op. cit.*, 44.

[19] *Loc. cit.* (above, note 1).

[20] Cf. Butler, *op. cit.*, 456–460. In 1910 Bell, in his analysis of the early Arab administration in Egypt, wrote: "Doubtless any tax-payer or χωρίον too heavily assessed had the right of appeal direct to the Governor. No such appeal is extant. . . ." (*P. Lond.* IV, p. xxvii). Bell's deduction, postulated on the basis of analogy in the absence of direct evidence, is rendered virtually certain by the Nessana papyrus (Inv. No. 6), which attests such a right of appeal in the neighbouring province of Filastin.

machinery practically unchanged. Even technical details show few changes. The governor's chancellery, for example, dated its Greek communications by Roman months (January, February, etc.) and by the Byzantine fifteen-year indiction cycle ; private documents continue to use the Macedonian months and even the Bostra Era, [21] which is the only element in the earlier system of dating suppressed by the Arabs in official documents—no doubt because that era was based on the Roman conquest of Arabia in 106 A.D. ; in the *entagia*, but only there, the indiction years are equated with Arab years dating from the Hegira. Similarly, the amounts stipulated in the *entagia* are expressed in *sextarii* for oil, *modii* for wheat and *solidi* for Arab dinars. In these same documents the Semitic form of the village name, Nestana, reappears,[22] although for the most part even officialdom as yet continues to use the Greek form Nessana.

But now the end is at hand. None of the Greek papyri or inscriptions is dated after 700 A.D. (though some of the undated documents may, of course, be slightly later). The only Auja finds later than that date are some pieces of pottery, nine Umayyad coins (i.e., before 750 A.D.), and perhaps of the Arabic papyri, which have not yet been read. Such a sudden falling away of evidence of all kinds can hardly be fortuitous. On the contrary, it would seem to point quite clearly to the first half of the eighth century as the period when Nessana (and the other Negev villages) were abandoned.

The reason for the disappearance of these villages is less readily apparent. Evidently, around or shortly after 700 A.D. conditions of life became intolerable in the Negev, after remaining relatively unchanged for half a century after the Arab conquest. The question is : Why ? Huntington

[21] Cf. Kraemer-Lewis, *loc. cit.* (note 1), 130–132.

[22] This must probably be regarded as evidence that the Semitic form had continued in use by the Semitic natives all through the centuries of Roman rule, rather than as an atavistic revival by the Arab administration, which in the seventh century had not yet entered on a deliberate policy of Arabization : cf. below.

and his followers find the answer in climatological change, but the objections to this theory have been stated above. A less fortuitous cause is suggested by the general course of Arab history. It was precisely in this period, in the Caliphate of Abd-al-Malik and his sons (685-743 A.D.) that the Arab state embarked on a new, nationalistic policy. Now the official records of Islam began to be kept in Arabic instead of in Greek, Coptic or Persian ; Arab coinage made its appearance, superseding the Byzantine currency thitherto employed ; and non-Arabs began to be eliminated from government service.[23] With this Arabization of rule came increasing fiscal burdens for the Christians[24]—burdens which they could now no longer escape by conversion to Islam,[25] and which, in conjunction perhaps with a diversion of trade as the Arab armies pressed far to the north and west, may well have rendered life impossible for the villagers of the Negev, who had already before, as we have seen (p. 114), had occasion to complain of fiscal oppression. On the marginal land of the Negev, existence must always have been precarious, and only a small change would be required to upset the delicate equilibrium. In the period of their prosperity, as we have seen, the production of the Negev villages was supplemented by financial assistance from the Byzantine Emperors, in the form of stipends and emoluments paid the military settlers ; in the first half-century of Arab rule, which terminated this positive support but otherwise changed conditions little, life could apparently still be sustained—and where life is even barely bearable people are generally reluctant to leave their homes ; but when the government changed its policy and began to make conditions as a result

[23] Cf., *e.g.*, P. K. Hitti, *History of the Arabs*[3], 206, 217–219 ; A. S. Tritton, *The Caliphs and their Non-Muslim Subjects*, 18–22. Suppression of the Christian and Jewish religions as such was not part of this policy ; religious persecution of Jews and Christians by the Caliphs did not begin until the eleventh century : cf., *e.g.*, A. A. Vasiliev, *Histoire de l'empire byzantin* II, 21–23.

[24] Cf. Diehl and Marçais, *op. cit.*, 208.

[25] Cf. Tritton, *op. cit.*, 2.

become increasingly difficult, life in the southern desert became impossible and the Negev villages disappeared.[26]

[26] Kirk, *loc. cit.*, 67, misunderstands the reason for the decline of the Negev villages and towns, ascribing it to " the weakening of central authority ", as a result of which " the effort required to maintain the standards of urban life became too great, and . . . the inhabitants either moved north into Palestine . . . or relapsed into nomadism ". It was not Arab weakness, but growing Arab strength (nationalism) that drove out the Negev inhabitants ; the weakness of central authority in the area would *result from* the growing depopulation and relapse into nomadism.

RECENT DISCOVERIES IN TRANS-JORDAN.

By G. Lankester Harding.

The spate of building activity which has been going on all over the country since the end of the war has brought to light an extremely interesting and important series of tomb groups and isolated objects from places as far apart as Um Keis and Madeba. Tomb groups range in period from Early Bronze to Byzantine, most important isolated objects are Roman and Byzantine. Of these the 2nd and 3rd century A.D. marble statue from Amman published in the *Illustrated London News* of 6th September, 1947, is outstanding ; nothing comparable to it has come out of Palestine and Trans-Jordan before. Also from Amman is a very fine portrait head in marble of the same period. A small partly excavated monastery, perhaps of the 6th century A.D., at Um al Kundum, south-west of Amman, has yielded what must surely be the earliest example of folding trellis work in Bronze. Scissors were, of course, known from Roman times, and this is only a logical development of the principle, but I am not aware of another example from this period.

From el Husn, south of Irbid, comes the Early Bronze group, with 68 complete or reconstructable pots, and a huge mass of decorated sherds of so-called band slip ware. Two periods of use of the cave can be seen, represented by the decorated sherds of perhaps E.B. II and the complete specimens of E.B. IV.

Next in date is one of the most important finds, a tomb group of the Hyksos period, in Amman. All the forms and wares most typical of the period are present, including black pricked ware, button-base vases, oil flasks, carinated bowls, etc., in addition to scarabs and bronze toggle pins. The importance of the group (95 pots, plus a mass of sherds)

lies in its relation to Dr. Glueck's conclusions as to the non-occupation of Trans-Jordan during the period 1800–1300 B.C. ; our group is probably about 1600. By its very nature, as a family vault, it is unlikely to be an isolated example, but without proper excavations in the country such assumptions must remain inconclusive.

Madeba yielded a tomb of the Late Bronze–Early Iron Ages, with objects and pottery strikingly similar to the Fosse Tombs of Tell Fara (Beth Pelet, I & II). Among the objects are bronze daggers with wood inlaid handles, bronze toggle pins, arrowheads, bracelets and ear-rings ; iron bracelets (in the minority) ; scarabs and beads. There are 119 pots, and some sherds of Mycenæan ware, altogether a considerable group.

In Amman the most important group is that of " Adoni Nur Servant of Ammi Nadab," as testified by his official seal mounted in a silver ring. The pottery of this group is very fragmentary as the tomb had been robbed and burnt anciently and again disturbed about 25 years ago. But 130 forms have been reconstructed, including ware of Petrie's " Assyrian dinner service " type (Gerar., p. 24, and Pl. LXV). Eleven different seals were found, three of them inscribed, and three in silver mounts. Among the objects are a gold fibula, bronze fibulæ and fragments of bronze vases with repoussé decoration, ear-rings in silver and bronze, silver finger rings, etc. Also the remains of three large pottery coffins and fragments of alabaster vases. The importance of the group lies in our being able to date it to the time of Ammi Nadab, who was king of Ammon under Ashur Bani Pal, *c.* 650 B.C. A seal of " Adoni Pelet, servant of Ammi Nadab " had been discovered in Amman more than 60 years ago. (Annual of the American Schools, II–III, p. 103 ff.)

Other groups include a huge tomb at Um-Keis of the 4th century A.D., with a nicely carved basalt façade and basalt door complete, and sundry Roman and Byzantine tombs in Amman. Still others have already been or are about to be,

published in the Quarterly of the Palestine Department of Antiquities (Vol. XI, a Nabatæan tomb ; Vol. XII, Iron Age tomb, both from Amman ; Vol. XIII, Iron Age tomb from Sahab ; about to appear, a Roman tomb from Amman and an Iron Age tomb from Meqabelein).

The actual work of excavation, and the reconstruction of the pottery of practically all the above groups, has been carried out by Hasan Awad al Qutshan, a Bedu of the Hanajreh tribe of Beersheba, who first came into excavation as a small boy at Tell Jemmeh in 1926. His services are given voluntarily, and it is entirely due to his skill, patience and enthusiasm that so much is recovered in such good condition. He has rendered a notable service to the archæology of Trans-Jordan.

From the above it will be seen that archæological activity has by no means stagnated during the past few years, and it illustrates very vividly the important results that await the spade of the systematic excavator in the country. It is hoped that a medium for full publications of these discoveries can be found in the near future, as the Palestine Museum Quarterly no longer functions and the Government of Trans-Jordan has not the funds available to publish for itself.

SALEM

By Cameron Mackay

Of the many Salems of Palestine only two aspire to the dignity of the Salem of Gen. xiv, 18, Ps. lxxvi, 2, and Heb. vii, 1—the Shechemite Salem and Jerusalem. Jerome[1], who can be cited for either, offers a third identification, popular among early pilgrims, with Salumias, eight Roman miles south of Bethshean, regarding it as the Σαλείμ of Jn. iii, 23 ; but as the last-named is now firmly identified with Salim three miles east of ancient Shechem, the issue rests between Samaritans and Jews.

It may also be presented as between B.C. evidence and A.D. inclination, the leaders in the debate being the Septuagint and Josephus. The Greek version declines to understand Salem as Jerusalem, though with sufficient motive for favouring the latter : indeed it must be Jewish prejudice which causes it to translate Ps. lxxvi, 2 (which *Jewish Encyc.* X, p. 650 says " undoubtedly refers to Jerusalem ") καὶ ἐγενήθη ἐν εἰρήνῃ ὁ τόπος αὐτοῦ. " His place," in the Septuagint view, could not be in Σαλήμ, which according to it was πόλιν Σηκίμων (Gen. xxxiii, 18), neighbour to Shechem and Samaria (Jer. xli [xlviii] 5 B ; Σαλὼμ A), near Esora, two miles north of Shechem (Judith iv, 4), and probably associated with τῆς γῆς Σαλείμ where Saul sought his father's asses (I Sam. ix, 4 A).

The Book of Jubilees xxx, 1 places Salem east of Shechem ; Eupolemos, another B.C. authority, makes Abraham meet Melchizedek at Mount Gerizim[2]; while the Septuagint attitude is reinforced for Christians when the Epistle to the Hebrews, for which the Greek version is authoritative, speaks of Melchizedek as king of Salem without correcting the, for

[1] *Quaestiones in Gen. ; Onomasticon ; Ep. ad Evang.* 27.
[2] Eusebius *Praep. Evang.* ix, 17, 5f.

its original readers, inevitable deduction : on the contrary, its argument implies that the true sanctuary is distinct from the Aaronic.

The opposing tradition found in Josephus and the Targums is evidently later than the Septuagint and smacks of anti-Samaritanism : the Pentateuchal witness to the supremacy of Shechem, Ebal and Gerizim, is conclusive if Salem's repute be added. Josephus says that Melchizedek Ἱεροσόλυμα τὴν πόλιν προσηγόρευσε, Σόλυμα καλουμένην πρότερον[3]. As serious history this ranks with his account of Pharaoh Necho's prodigious expedition to carry off Abraham's consort, Queen Sarah, the issue of which was that Necho learned better than Moses to reverence Jerusalem[4]. In the Old Testament the prior name of Jerusalem is Jebus. In Egyptian texts *c.* 2000 B.C. the name is Ursalimmu (Sethe)[5], in the Amarna letters Urusalim, and the shortened form has not been found : on the other hand, in an inscription of Ramses II a name transliterated as Śherem=Salom occurs among towns of Northern Palestine[6].

In this conflict of authority the Christian urge has been to favour Jerusalem as home of Melchizedek's exalted order. This bias appears in EVV translation of שָׁלֵם as " Salem " in Gen. xiv, 18, but " Shalem, a city of Shechem " in xxxiii, 18. The verdict of the latter passage is more straightforwardly assailed in RV's unwillingness to take שָׁלֵם there as a proper name, on the ground that there is no other case of a village being described as a " city " of a neighbouring town. This view has the Samaritan text and much modern authority behind it, but the translation of Septuagint, Peshitta, and Vulgate is grammatically possible, while " in peace " has been dubbed " unnecessary," " not natural," " impossible "[7]. The case for Jerusalem is left hanging on preference for RV's text against its margin.

[3] *War* vi, 10, 1 ; *Antiq.* i, 10, 2 ; vii, 3, 2.
[4] *War* v, 9, 4.
[5] *Companion to Bible* (ed. Manson, 1939), p. 176.
[6] Breasted *Anc. Records* III, §356.
[7] Robinson *Biblical Researches* II, p. 280 ; Cheyne *Encyc. Biblica*, 4421 ; Wellhausen in *ICC ad loc.*

How then does it maintain conviction? The three buttresses are Adonizedek (Josh. x, 1, 3), Ps. lxxvi, and Ps. cx. As names compounded with *zedek* are now known to have been widespread, from Phoenicia to South Arabia, territorial connection with Melchizedek can no longer be deduced from the name of Jerusalem's king six centuries later. Equally nebulous is the witness of Ps. lxxvi, 2, " In Shalem also is his covert, and his lair in Zion " : to identify Shalem with Zion there is as gratuitous as to identify Israel with Judah in the preceding verse, or a lion's covert with its lair.

The deciding passage has rather been Ps. cx, wherein Zion is the royal seat of the Melchizedek priest. This raises the same question as Ps. lxxvi : if in Shalem is his " place " (LXX), in Zion his seat, must sanctuary and throne be identical? Against such parochial view of the Priest-King's demesne Ezekiel warns in his vision of a Zadokite temple separate from the city of God—30 miles north of it by his measurements[8], and so at Shechem : there the Glory dwells in the sanctuary, while on the right hand " the Lord is there " in the city. Accordantly, in Revelation, in the Ezekielian context of Gog and Magog, we find *τὴν παρεμβολὴν τῶν ἁγίων* distinct from the beloved city (xx, 9), and, again in Ezekelian context of rainbow, book as honey in the mouth, and measuring reed, the holy city trodden down of the Gentiles while the *ναός* of God is preserved along with altar and worshippers (xi, 1f), an oracle explicable in the continuance of Samaritan sacrifice at Shechem. In Hebrews the Melchizedek High Priest enters no more into the sanctuary but sits as King on the right hand of the Majesty : the Epistle speaks of a tabernacle in the heavens, but truth cannot be belied by its " very image " on earth, and in that *εἰκών* (x, 1) the true, as against the Aaronic, sanctuary is the Septuagint's Salem (vii, 1 ; viii, 2), while the city of God is Zion (xii, 22).

The crucial objection against Shechem being the Melchizedek sanctuary, that the once-for-all sacrifice was not

[8] *Expository Times* LV, pp. 292ff.

offered there, is met by the Epistle's explanation that Jesus suffered without the camp to sanctify the people (xiii, 11ff). Applied to historical Jerusalem the statement is worse than pointless, since the people were inside the Mosaic camp represented by the holy city, and the prodigy would have been if an execution had been allowed within it. The Epistle is taking for granted the Ezekielian *παρεμβολὴν τῶν ἁγίων*, the true tabernacle of its thesis.

Thus, even if Salem should yet be attested as an early name of Jerusalem, the case for Shechem would still have basis in prophet, Gospel, Epistle, and Apocalypse, could always turn to Septuagint, Jubilees, Peshitta, and Vulgate to show that for Jews and Church Fathers the Salem of Genesis was beside Shechem, and against Josephus and the Targums cite Eusebius[9], Epiphanius[10], Ambrose[11], and the Madaba map. It can also urge that the King's Vale (עֵמֶק) must be a broad, open valley, not a ravine like the Kidron Valley, while the vale of Shaveh ("Plain") suggests the Shechem valley leading from the Plains of Salim and of Makhneh, which meet at right angles at its mouth. Finally, as prelude to an attempt to redintegrate Salem's story, two passages from the prophets may be collated. Of Jerusalem Ezekiel says, leaving no place for Melchizedek in his allegory, "Thou wast cast out in the open field, for that thy person was abhorred, in the day that thou wast born" (xvi, 5). Of the true "place" Jeremiah writes, "A glorious throne, on high from the beginning, is the place of our sanctuary" (xvii, 12).

The beginning looks back to the millennium before Abraham, for the Bible finds Shechem an established native sanctuary. Abraham came to the "place" or sacred enclosure of Shechem with its teacher's tree when the Canaanites were in possession (Gen. xii, 6), and acknowledged the authority of its priest. Moses described Gerizim and Ebal as "behind the road of the sun's going down in the land of the Canaanites who dwell in the Arabah, over

[9] *Σαλήμ· πόλις Σικίμων, ἥτις ἐστι Συχέμ.—Onomasticon.*

[10] *Adv. Haer.* II, p. 469.

[11] "*oppidum in metropoli Sichem.*"—*Epist. ad Hebr. c.* vii.

against Gilgal, beside the trees[12] of Moreh," *i.e.*, haloed by the sunset as seen over the Jerusalem-Shechem road, with cromlech at modern Juleijil between Salim and Gerizim, and oracular grove (cp. " the augurs' tree," Judg. ix, 37). Archæologists agree that the Canaanite temple was already built when Joshua came, yet he no less than the natives revered " the tree that was in the sanctuary of Jehovah " (Josh. xxiv, 26 ; Judg. ix, 6), while he placed the national altar on the mountain the Canaanites called " the navel of the land " or " earth " (Josh. viii, 30 ; Judg. ix, 37), the term the Greeks applied to Delphi[13].

The features exalting this sanctuary would strike eyes less hampered than ours by trees from seeing the wood. The impress made on the ancient world by Syria's bisection into sinister and dexter versants at the Lebanon watershed, whence Orontes or Typhon, the dragon[14], sets off northward, Litany and Jordan southward, is stamped all over the divide. The coastal kingdom there was Gebal, " boundary," where southern Osiris, slain by Typhon, found his tree-grave, and where at Afka or Aphek, on the north side of Sannin, the watershed crest, the kindred life-spirit Adonis was slain. Gebal, Aphek, Berothah, and הֹר הָהָר, " the swell of the range," became boundary indices for Israel[15]. In the sea-roots of Sannin at the Dog River Egypt and Assyria took pride in carving their imperial attainments, while the Dog or Lycus River with legendary canine effigy suggests the jackal-headed Anubis, opener of the way from life to death. The impulse behind this tradition of the meeting there of north and south caused the Romans to erect on the water-parting at Baalbek the greatest temples of their empire, and still persuades the English that their patron saint slew the dragon at Beirut.

On the right-hand side the overpowering feature is a

[12] Singular in Sam. and LXX of Deut. xi, 30.

[13] Strabo ix, 3, 6 ; Livy xxxviii, 48. Cp. Ezek. xxxviii, 12.

[14] Strabo xvi, 2, 7.

[15] Josh. xiii 4f ; Ezek. xlvii, 16 ; Num. xxxiv, 7. See *Journal of Theol. Studies* XXXV, pp. 22ff.

valley " dug so deep into the earth's surface that it seems to be a valley of hell. It is the valley of damnation[16]," with rising above it, a matter of 2,500 feet in three to 10 miles, the mountains of the land of life—at its centre, and drawing the eye from the first, Shechem. Whether viewed from east or west, the long, uniform skyline of the Central Range is broken only at one point, where towards its north the bold round hills of Ebal and Gerizim inclose the Shechem pass[17]. From the viewpoint of the Arabah Deuteronomy asks us to look at " the head of the ancient mountains " (xxxiii, 15) in " the middle of the land," bathed in light an hour after darkness has fallen on Jordan 4,000 feet below, with the clear-cut passage between the hills of life and death (xi, 29 ; xxvii, 12f), pillars of the " entering-in " of the sun to his bridal chamber (Ps. xix, 5).

According to classical authorities, with support from the Ras Shamra tablets, the Phœnicians originally came from the south-east and settled in the Dead Sea zone[18]. The date-palm with which their name associates them flourishes in the Arabah ; and the wild tree, with green crest rising from the dead fronds enshrouding its stem, would have its life-out-of-death symbolism reinforced by the phœnix-land rising from the valley of the shadow to the mountains of light. From the Ras Shamra tablets it seems that the dwellers in the Arabah (" Arabim ") worshipped a god Shalem closely associated with Sahar, " the morning "[19] : the creed of his adorers, as they watched the sun go down over his sanctuary, is surely expressible in the words of the Melchizedek psalm, " On the mountains of holiness, from the womb of the morning, thou hast the dew of thy youth " (cx, 3 RVm).

That " thy dew is the dew of light, and the earth shall

[16] Bolitho *Beside Galilee*, p. 79.

[17] G. A. Smith *Hist. Geog.* pp. 119f, 247, 332.

[18] Herodotus i, 1 ; vii, 89 ; Strabo xvi, 3, 4f ; Justin xviii, 3, (" *Assyrium stagnum* ") ; Jack *Ras Shamra Tablets*, p. 42. Cp. Num. xiii, 29.

[19] Jack, *op. cit.* pp. 21, 42, 53. In the Amarna letters Tyre is the " city of Shalmiati," its king his servant.

cast forth the dead " (Is. xxvi, 19) was the Phœnician belief[20]. The pillars of Melkart, the "King" of Tyre, one golden, one phosphorescent, represented Fire and Spirit[21], while his annual burning and resurrection are attested[22]. In historical times this burning took place behind the northern Pillar of Hercules (the name the Greeks gave him) ; but when the Phœnician world was smaller, his death-place at the sunset must have been farther east ; so we may think of it as once in the north-west corner of Sicily at Eryx, earlier still, when the Mediterranean was unvisited, on the rock isle of Tyre, and in the beginning, when the Canaanites reached the Arabah, at the pass of Shalem, the " King's Vale " between the prehistoric pillars of Hercules.

The Tyrians dated their temple to the 28th century, so that by Abraham's time the centre of the cult had long moved westward. But what we know of Melchizedek, that he worshipped El Elyon (LXX, ὁ Θεὸς ὁ ὕψιστος), maker of heaven and earth, and brought forth bread and wine, homologates the continuance of Salem as a home of resurrection-faith. The Phœnician deity Ἑλιοῦν καλούμενος Ὕψιστος, father of " Heaven and " Earth," is identified with the classical Adonis[23]. In Judges the deity of Shechem is Berith, " covenant," and Βηρούθ was Eliun's bride[24]. In Roman times, when a temple of Ζεὺς ὕψιστος[25] stood on the ὄρος ὑψίστου Gerizim[26], the underworld bride of Adonis, Kore or Persephone, personification of the wheat, was still honoured at Shechem[27]. What is suggested for Melchizedek is worship of a single Most High God, controller of heaven

[20] Cp. the symbolic dew at Canaanite tombs, Jack, p. 47.

[21] Herodotus ii, 44 ; Eusebius *Praep. Evang.* i, 10, 10.

[22] Pausanias x, 4, 6 ; Ezek. xxviii, 18 ; Josephus *Antiq.* viii, 5, 3 (ἔγερσιν) ; Athenaeus ix, 47 ; Frazer *Adonis*, ch. v.

[23] See more fully my article, " The Order of Melchizedek ", in *Church Quarterly Review* CXXXVIII, pp. 175ff.

[24] Judg. viii, 33 ; ix, 4, 46 ; *Praep. Evang.* i, 10, 14.

[25] Smith's *Dict. of Gr. and R. Geog. s. vv.* " Gerizim," " Neapolis " ; cp. Josephus *Antiq.* ix, 14, 3, τὸν μέγιστον θεὸν ; Jn. iv, 21, τῷ πατρί.

[26] *Praep. Evang.* ix, 17, 5.

[27] Lods in *Record and Revelation* (ed. Robinson, 1938), p. 213.

and nature and Sheol, wedded to the Noachic covenant of life-out-of-death (Gen. viii, 22), identifiable with Jehovah, and having for symbols a tree, possibly a palm[28], and the bread and wine which Christianity received as pledge of the covenant of life. It is in keeping that Salem's priest took it upon himself to bless the representative of the phœnix-land in whose person the Dead Sea had sprung to life, and that the sequel was life out of death for Abraham and the world[28].

The probability that the scene of Isaac's figured resurrection was a mountain of Shechem is high[29]. His immediate descendants revered the place above any other. Jacob built Israel's first altar there, adopted El Elyon as El, the God of Israel, buried his retinue's mascots beneath its tree, bequeathed the place as a choice portion to his favourite Joseph[30], and, dying, worshipped on the pilgrim's staff which spoke of arrival at Salem from previous exile[31]. From Egypt Joseph by faith committed his bones to the field of his youthful rencontre (Gen. xxxvii, 15), and there the other tribal fathers found eventual sepulture (Acts vii, 15f). As Moses looked on the land of the promise his gaze was held by the twin symbolic peaks, and to the sinister he assigned the national altar. Joshua, as Abraham and Jacob, made Shechem his goal, without local opposition carried out Moses' commands, balancing Israel's destiny on right and left hand of watchers for the sunrise, and at his life's close reassembled the tribes there to pledge themselves to Jehovah.

[28] Wellhausen *Hist. Israel*, p. 238, note. On coins of Shechem *temp.* Titus a palm was the type. In Ezekiel's temple the palm is the emblem. The fame of the tree survives in mod. Balata near Jacob's Well, Balanus of *Onomast.*, fr. *βάλανος*, "acorn," "date," or corresponding tree: the *βάλανος* of Gen. xxxv, 8 was a palm (Judg. iv, 5).

[29] The spot cannot have been just outside a well-known city, as Jerusalem then was. LXX of Gen. xxii, 2 has *τὴν ὑψηλὴν*, as in xii, 6; Deut. xi, 30. Amos vii, 9 locates "the high places of Isaac" in the northern kingdom. Cp. Pirqe de R. Eliezer, *c.* 20 and 36; Yalqut Genesis, § 34; Maundeville, ch. ix; Stanley *Sinai and Palestine*, note to ch. v.

[30] Gen. xlviii, 22 (RVm, LXX); Josh. xxiv, 32; Jn. iv, 5.

[31] Gen. xxxii, 10; xlvii, 31 (LXX); Heb. xi, 21.

It was curse, not blessing, that his pillar of remembrance called down, for the next generation sought other gods. Though its prestige lingered[32], of Shechem as Israel's place we hear no more. "Ephraim, as I have seen Tyre, is planted in an enclosure . . . I will drive them out of mine house" (Hos. ix, 13ff). "And the king of Assyria brought men . . . and placed them in the cities of Samaria" (2 Kgs. xvii). "O ye house of Israel . . . ye have brought in aliens . . . ye have set keepers of my charge in my sanctuary for yourselves" (Ezek. xliv, 6ff). Yet the hope of Salem lived. "God hath spoken in his sanctuary: I will exult, and portion out Shechem" (Ps. lx, 6=cviii, 7, LXX). At the end of the day "the mountain of the Lord's house shall be established at the head of the mountains" (Is. ii, 2=Mic. iv, 1). Ezekiel visioned the temple of Zadok's King and of the palm on the mountain of death. Zechariah saw "no more a Canaanite in the house of the Lord of hosts" (xiv, 21).

The deep roots of Salem still burgeon: since 70 A.D. sacrifice in Palestine to Abraham's God has persisted only there. The unique record of the שֹׁמְרִים, as the Samaritans call themselves, derives from wardenship of a sanctuary whose primeval and supranational claims cannot be challenged by Moriah, David's *faute de mieux* (1 Chron. xxi, 28ff). What but its associations drew the Melchizedek High Priest along the sunset road to the King's Vale to announce there what he hid from the heirs of salvation, Ἐγώ εἰμι, ὁ λαλῶν σοι, and to be recognized as ὁ σωτὴρ τοῦ κόσμου? It was no merit in the Samaritans, aliens (Lk. xvii, 18) to whom he was not sent (Mt. x, 5f; xv, 24), worshipping "ye know not what," and represented in a loose woman. It was "his own country" (Jn. iv, 44), though to this day the Prophet has had no honour there.

"I have meat to eat that ye know not of," he told his disciples: his thoughts were of the resurrection—of making

[32] 1 Kgs. xii, 1, 25; Hos. vi, 9 (RV, LXX). The Gilgal beside Shechem (Deut. xi, 30; 1 Macc. ix, 2) was most probably that of 2 Kgs. ii, 1; iv, 38.

shalem the Father's will that he should lose nothing at the last day of all that had been given him (iv, 34 ; vi, 39f). As on that winter afternoon he looked on the fields where resurrection-faith founded on seedtime and harvest had been sown, he saw the corn ripe to fall from which should come the bread of life, that sower and reaper might rejoice together. Ἐγώ εἰμι—not alone the Messiah of Jews and Samaritans, but the Lord and King and Most High of the nations, the corn of wheat that dies to bear much fruit, the Sun of rightwiseness passing to the underworld to find his bride and appear in the morning τετελειωμένος (Heb. vii, 28). It is easy to contemn the distortions of ancient resurrection-faith ; but the last words from Salem, a parable on the Shechemite bread in the apostles' hands, request a generous attitude, " Other men laboured, and ye are entered into their labours."

Beside them may be placed his last words on earth, Σαμαρίᾳ καὶ ἕως ἐσχάτου τῆς γῆς.

CAMERON MACKAY.

OSTRACON III : 13-18 FROM TELL ED-DUWEIR

By D. Winton Thomas

The text of Ostracon III, lines 13-18 from Tell ed-Duweir, beginning with the last two words of line 13, runs in Torczyner's revised edition[1] as follows :—

13 . . . . . ולעבדך . הגד׳
14 .לאמר ירד שר . הצבא
15 . בניהו בן אלנתן לבא.
16 . [illegible] ואש
17 .הודויהו בן אחיהו ו
18 . אנשו שלח . לקחת . מזה.

We may translate :—

13. And to thy servant it has been told
14. saying—" Down has gone the commander of the army
15. Konyahu the son of Elnathan to come
16. to Egypt ". And
17. Hodawyahu the son of Ahiyahu and
18. his men he has sent to take from here.

[1] H. Torczyner, תעודות לכיש, Jerusalem, 1940, p. 90. This work is referred to hereafter by the abbreviation T[2]. Other abbreviations employed in this article are : A.-W.F. Albright, in *Bull. of Amer. Schools of Or. Res. ;* B. -S. Birnbaum, The Lachish Ostraca II, in *P.E.Q.*, 1939, pp. 91ff ; C.-U. Cassuto, I primi quattro ostraca di Lakis, in *Riv. degli Stud. Orient.*, xvi (1935–37), pp. 163ff., 393f. ; D.-R. Dussaud, Le prophète Jérémie et les lettres de Lakish, in *Syria*, xix (1938) pp. 256 ff. ; E.[1]-K.Elliger, Die Ostraka von Lackis, in *Palästinajahrb.*, 1938, pp. 30ff. ; E.[2]—the same writer's : Zu Text u. Schrift der Ostraka von Lachis, in *Zeitschr. d. Deutsch. Pal. Vereins*, 1939, pp. 63ff. ; H.-J. Hempel, Die Ostraka von Lakis, in *Zeitschr. für d. alttestamentl. Wiss.*, 1938, pp. 126ff. ; J.–J. W. Jack, The Lachish Letters ; their Date and Import, in *P.E.Q.* 1938, pp. 165ff. ; M.–H. Michaud, Le témoignage des ostraca de Tell, Douweir concernant le prophète Jérémie, in *Rev. des Etudes Sémitiques–Babyloniaca*, 1941, pp. 42ff. ; O.–M. A. Van den Oudenrijn, Les fouilles de Lakis et l'étude de l'Ancien Testament (Librairie de l'Université, Fribourg en Suisse, 1942) ; T.[1]–H. Torczyner, The Lachish Letters, 1938 ; V.–R. de Vaux, Les Ostraka de Lâchis, in *Rev. Biblique*, 1939, pp. 181ff. ; Va.–A. Vaccari, Le Lettere di Lachis, in *Biblica*, vol. 20 (1939), pp. 180ff. ; Ve.–B. M. Vellas, *Τὰ νέα ὄστρακα τῆς Λάχης*, Athens, 1939.

Three noteworthy variant readings which have been proposed must first be considered. In the first place, Michaud has suggested that, instead of ירד in line 14, סדר should be read. The meaning would then be that the commander of the army " set (troops) in order ", *i.e.*, preparatory to going to Egypt, he disposed troops in different parts of the country, and his sending for Hodawyahu and his men (lines 16-18) was part of this troop movement[1]. The Hebrew root סדר does not occur in the Old Testament, though derivatives of it do. The root is, however, known, with the meaning " arrange in order, in rank ", in Accadian, Aramaic and New Hebrew, and derivatives from it, meaning " arrangement, rank, row ", occur in all these languages[2]. If Michaud's reading were correct, it would provide us with the earliest known occurrence of the root סדר in Hebrew. A study of the photographs in T^1 and T^2, however, convinces the present writer that Michaud's reading is not correct. There are three quite clear examples of the letter ס on this ostracon, viz., in lines 5, 9 and 19; and two fairly clear examples may be seen in lines 9 and 10. A comparison of the letter which Michaud reads as ס with these examples makes it difficult to believe that he reads the letter correctly. On the other hand, a comparison with clear examples of ר make it certain that ר is the right reading (see, *e.g.*, the ר in lines 1, 2, 8, 15 and 16). As for Michaud's דר in place of רד, as read above, ר and ד are, it is true, not always easy to distinguish on these ostraca. But the letter ר here may be compared with ר in, for example, לאמר (line 14), or in מצרימה (line 16), or with the first letter of line 21. Similarly, ד here may be compared with ד in, for example, עבדך (line 1) and in ידעתה (line 8). The palæographical evidence is, we believe, against Michaud's reading, and in favour of the commonly accepted ירד.

[1] M. 52f. The reading סדר is preferred by Michaud to another which was suggested to him by Professor Lods, viz., סרר " revolted " (Is. i, 23 is especially compared).

[2] *Ibid.*, *loc. cit.*; cp. C. F. Burney, *The Book of Judges*, 2nd ed., 1920, p. 73.

The second variant reading to be considered is ואל " and unto[1] " in place of יאת in line 16. The letter following the א is, to be sure, very indistinct—it does not appear at all, it may be noted, in Harding's handcopy[2]—but the traces that are still visible suggest a ת more than anything else[3]. The reading ואת may therefore be retained.

There remains to be considered Albright's suggestion that the middle letter of the last word in line 18 is to be read, not as ז, but as י. At first he postulated in explanation of the reading מיה a hitherto unknown Hebrew word meaning " rations, allowance " (of food and other necessities)[4]. More recently he has suggested that מיה is a scribal error for מידה " from his hand, from him.[5]". It may be observed, however, that in י on these ostraca the stem is always prolonged below the cross-bar[6]. This is not the case here. The character in question is, in the present writer's view, most probably a ז, and this reading may, at any rate for the present, be accepted.

Our examination of the photographs leads then to the conclusion that the three proposed readings which have been considered are in no way to be preferred to those of T[2]. The text as given in T[2] represents, we believe, the correct reading of these lines.

We turn now to a consideration of the translation of these lines. Comment on three points needs to be made in justification of the translation offered above. First, some scholars[1] treat everything after לאמר (line 14) as part of what Hosha'yahu, the sender of the letter, has been told—as though everything from ירד (line 14) to מיזה (line 18) were in inverted commas. It seems preferable, however, to

[1] So C. 169 ; A. 82 (1941) 20, and Torczyner at first (see T[1] 58). The reading ואת was preferred by A. earlier (73 (1939) 19).

[2] T[1], 50.

[3] B. 97 finds no trace of a ל, and thinks there is no room for one.

[4] 73 (1939), 19.

[5] 82 (1941), 20. For the omission of the ד he compares עבך in line 21, which is an error for עבדך.

[6] Cp. J. 181, n.2, and the Table of Alphabets in T[1] (facing p. 220).

[1] *E.g.*, H. 130f. ; A. 73 (1939) 19, 82 (1941) 21 ; Va. 187.

regard the sentence beginning with ואת and ending with מזה as a statement made by Hosha'yahu concerning something he knew about at first hand, and not concerning something that has been told him[2]. Secondly, the words ואת הורויהו בן אחיהו ואנשו are to be regarded as in the accusative after לקחת[3], not after שלח. We are to understand, not that Konyahu "sent Hodawyahu and his men to take (something)"[4], but that Konyahu "sent (an order by a messenger) to take Hodawyahu and his men", as Saul "sent (וישלח) messengers to take (לקחת) David" (I Sam. xix, 14). Thirdly, Albright's[5] earlier suggestion that in line 18 מזה should be read as מָזֶה in the sense of "provisions", comparing מָזוֹן (Gen. xlv, 23; II Chr. xi, 23), מָזִי (Deut. xxxii, 24) and מָזוֹן (Ps. cxliv, 13), has found acceptance with some scholars[6]. But surely it is more natural to read מזה after לקחת as מִזֶּה "from here", as Torczyner[7] did from the first (cp. Jer. xxxviii, 10)?

From these lines, as translated above, we understand that Hosha'yahu is reporting to Ya'ush, the military governor of Lachish, and his superior officer, first, that he has been told that Konyahu, the commander of the army, has gone to Egypt, and secondly, that Konyahu has sent orders to Hosha'yahu's outpost—wherever that was[1]—that Hodaw-

[2] So E² 68; V. 189.

[3] So T¹ 58; T² 78ff.; J. 174, n 1; M. 54; Va. 189. For the order of the sentence—accusative, verb, infinitive construct—cp. I Sam. xv, 1.

[4] The object of לקחת is מזה, read as מָזֶה "provisions", according to some scholars (for this reading see a little further on in this article). A., reading מיה (*v. supra*) in place of מָזֶה, which he favoured earlier, remarks that לקח in the sense of "buy" need not take an object. He translates—"and unto Hodaviah son of Ahijah and his men hath he sent to obtain (supplies) from him" (82 (1941) 20, n. 14, and p. 21).

[5] A. 61 (1936) 13, 70 (1938) 14, 73 (1939) 19.

[6] H. 131; V. 189, 193, 201; E¹ 43, 55; E² 68; Ve 13, 15, n. 16; O. 53.

[7] T¹ 51, 59. So also Va. 187; M. 53f.; D. 265, n. 1; C. 169, 393; J. 174, n. 1.

[1] See the present writer's "*The Prophet*" *in the Lachish Ostraca*, 1946, p. 10f., for the question of the location of Hosha'yahu's outpost.

yahu and his men[2] should be moved thence to another place. Hosha'yahu, as commanding the outpost, will no doubt himself have received the order from the messenger who brought it, and will have been responsible for seeing that it was carried out. As has already been said, Hosha'yahu, when he reported on this matter to Ya'ush, was reporting something about which he personally had knowledge.

The ostracon gives us no information as to the object of Konyahu's journey to Egypt. We are, therefore, thrown back upon surmise. The visit of a high ranking officer[3] to Egypt clearly implies a mission of a military character. Seeing that it was to Egypt that the government of Judah looked for aid in their struggle against the Babylonians, it would not be surprising if they sent Konyahu to Egypt to engage in staff talks with the military authorities there. So much may be said with some confidence. The silence of the ostracon forbids us to say more[4] We are, further, told

[2] For אנשים " men " in the sense of troops, cp. I Sam. xviii, 27, xxiii, 3.

[3] Konyahu may have been the commander in chief of the whole army of Judah ; cp. B. 96, and E. Junge, *Die Wiederaufbau des Heerwesens des Reiches Juda unter Josia*, 1937, p. 54, n. 2. Or he may have been the commander in chief of the forces of the west ; cp. O. 49, n. 90. E[1] 55, n. 1, thinks that his title indicates that he belonged to Jerusalem.

[4] A number of different views have been expressed by scholars as to the object of Konyahu's journey to Egypt. Jack, *e.g.*, p. 183, who assigns the ostraca to the year 587 B.C., thinks that Konyahu went to Egypt to make a fresh appeal for help at the time when the Babylonians resumed the siege of Jerusalem which they had been obliged to interrupt when an Egyptian army, sent by Hophra in 588 B.C., moved into southern Palestine (cp. Jer. xxxiv, 21 ; xxxvii, 6ff). Cp. Va. 189. Elliger, who assigns the ostraca to the period when the Babylonians interrupted their campaign to deal with the advancing Egyptian army, believes that the object of Konyahu's journey to Egypt was not to seek help, but to join up with the Egyptian army preparatory to striking a blow together against the Babylonians (E.[1] 55 ; E.[2] 78f.). It may be pointed out that the dating of the ostraca is important here ; for, if the ostraca belong to the summer of 589 B.C. (for this dating, see the present writer, *op. cit.*, p. 6), Konyahu will have gone to Egypt before the events with which Jack and Elliger would connect his journey had taken place. Quite a different view is put forward by J. A. Montgomery (in *Record and Revelation*, ed. H. Wheeler Robinson, 1938, p. 24), who suggests that Konyahu went to Egypt in flight—he cites Jer. xli, 15ff and xliii for similar cases of flight in contemporary history. Cp. D. 264f. Torczyner's view that Konyahu's journey to Egypt is to be identified with the expedition which was sent by Jehoiakim to fetch the prophet Uriah from Egypt (Jer. xxvi, 20ff) has been shown to be untenable (see the present writer, *op. cit.*, p. 10f.).

nothing concerning the place to which Hodawyahu and his men were moved. Nor do we know Konyahu's reasons for moving them. Perhaps it was his intention that they should accompany him to Egypt. But this is no more than a guess. He may have had quite other reasons for ordering a troop movement of this kind.

REVIEWS AND NOTICES

The Alphabet : A Key to the History of Mankind. By David Diringer, D.Litt. Foreword by Sir Ellis Minns, Litt.D., F.B.A. pp. 607 (Hutchinson, 50*s*.).

In 1937 Dr. Diringer published a book called *L'Alfabeto nella Storia della Civiltà*, eight hundred pages in length and containing three hundred and twenty-seven plates. The present volume in English, which is planned on a scale comparable with the Italian work—the two hundred and fifty or more " figures " include nearly a thousand illustrations—offers a presentation of the subject which, both in form and substance, is new. The object of the book, which is aimed at reaching both the scholar and the ordinary reader, is to provide an introduction to the history of the alphabet—" to trace how alphabets came into being and attained their position as a fundamental in the communication of ideas and the dissemination of knowledge " (p. 21).

After a brief preface (pp. 13–16) and an introduction (pp. 17–37) come the two main parts into which the book is divided. Part I gives a historical sketch of the development of the non-alphabetic scripts, and Part II deals with the origin and development of the alphabet. The immense scope of the book can best be illustrated by a brief recital of the contents of these two parts. Part I consists of eleven chapters, each of which is accompanied by a bibliography. The first nine chapters deal, in roughly chronological order, with " transitional " systems of writing, usually called ideographic scripts. Thus Ch. I (pp. 41–57) deals with cuneiform writing ; Ch. II (pp. 58–71) with hieroglyphic writing, together with hieratic and demotic ; Ch. III (pp. 72–80) with Cretan scripts ; Ch. IV (pp. 81–88) with Indus valley scripts ; Ch. V (pp. 89–97) with Hittite scripts ; Ch. VI (pp. 98–119) with Chinese writing ; Ch. VII (pp. 120–135)

with ancient central American and Mexican scripts; Ch. VIII (pp. 136–140) with the script of Easter Island; Ch. IX (pp. 141–157) with other ideographic scripts (of non-Chinese peoples of China, of West Africa, etc.). Ch. X (pp. 158–185) deals with syllyabic systems of writing (the pseudo-hieroglyphic script of Byblos, the Cypriote syllabary, Japanese scripts, etc.), and Ch. XI (pp. 186–191) with quasi-alphabetic scripts (early Persian cuneiform, and Meroïtic scripts). Part II consists of ten chapters, each again with its own bibliography. Ch. I (pp. 195–222) deals with the origin of the alphabet, and with various scripts which are partly undeciphered and had only limited use, but which may have had some connection with the problem of the origin of the alphabet; Ch. II (pp. 223–234) with the South Semitic alphabets; Ch. III (pp. 235–252) with the Canaanite branch; Ch. IV (pp. 253–300) with the Aramaic branch; Ch. V (pp. 301–327) with non-Semitic offshoots of the Aramaic branch (Persian, Iranian, Mongolian, Armenian, Georgian scripts, etc.); Ch. VI (pp. 328–400) with the Indian branch; Ch. VII (pp. 401–448) with the Further Indian branch; Ch. VIII (pp. 449–489) with the Greek alphabet and its offshoots (Coptic, Gothic, early Slavonic alphabets, etc.); Ch. IX (pp. 490–532) with the Etruscan and Italic alphabets (with an appendix on runes and oghams); and Ch. X (pp. 533–565) with the Latin alphabet. A short Conclusion (pp. 566–572) is followed by a general bibliography (pp. 574–576) and a full index (pp. 577–607).

The reader will doubtless wish to know something of Dr. Diringer's views on the much debated problem of the origin of the alphabet. Briefly stated they are as follows. He regards as erroneous all the attempts which have been made to seek the origin of the alphabet in the ancient writing of Egypt, or in the cuneiform scripts, or in the syllabary of Cyprus, or in the Hittite hieroglyphs, or in the Cretan signs, though he will allow that the inventor of the alphabet may have known something of the last mentioned, and also about the geometric prehistoric marks employed throughout the Mediterranean areas from the earliest times (p. 197f). Nor

does he find acceptable the view that the proto-Sinaitic inscriptions represent an intermediate stage between the Egyptian hieroglyphs and the Semitic alphabet. The most that he will commit himself to in this respect is that in these inscriptions there may be seen one of the earliest known attempts at alphabetic writing (p. 200). As for the alphabet of Ras Shamrah—which may have originated in the sixteenth century B.C.—it was, Dr. Diringer thinks, invented by a native who already knew the North Semitic alphabet, but was accustomed to the use of clay and stylus (p. 204). With regard to Dunand's theory that the pseudo-hieroglyphic script of the documents discovered by him at Byblos represents the prototype of the alphabet, Dr. Diringer is not inclined to reject it out of hand, but he entertains certain doubts about their decipherment and their date. One thing, however, he does regard as certain, namely, that in Byblos one or more attempts were being made in the early second millennium B.C. to introduce alphabetic writing (p. 205f). Dr. Diringer is not convinced either that the problem has been brought nearer to solution by the discovery of the early Canaanite inscriptions of the Bronze Age, which have been claimed as the missing link between the script of the Sinaitic inscriptions and the earliest known Phœnician alphabetic forms. In his view the connection between these inscriptions, whose decipherment still presents many problems, and the North Semitic script remains uncertain, and he would see in them rather another independent attempt of the second millennium B.C. to introduce alphabetic writing (p. 208ff). Dr. Diringer's own view is that, if Dunand's recent discoveries, about which, as has been said, he feels some doubt, are left out of account, the only trustworthy starting point for the study of the history of the alphabet is to be found in the earliest North Semitic inscriptions (Akhiram, Yekhimilk, the Gezer calendar, etc.), which he ascribes to the eleventh and tenth centuries B.C. (p. 212). The actual prototype of the alphabet was not, he thinks, remarkably different from the writing of these inscriptions (p. 211). The origin of the North Semitic alphabet, or of its prototype, which may be

called the proto-Semitic alphabet, may, in his view, be dated in the second quarter of the second millennium B.C., probably in the Hyksos period. The political situation in the Near East at that time favoured, he suggests, the creation of a " revolutionary " writing—a script which he designates " democratic "—in contradistinction to " theocratic " scripts, such as those of Egypt and Mesopotamia (p. 214). As to the place where the alphabet was invented, Dr. Diringer is clear that, whilst its exact birthplace is unknown, we must not look for its origin in the region of Sinai, but in Palestine and Syria, which, as he holds, " offered all the required conditions for the invention and the elaboration of alphabetic writing." " No other people in the world ", continues the author, " has been able to develop a true alphabetic writing. The more or less civilized peoples of Egypt, Mesopotamia, Crete, Asia Minor, Indus Valley, China, Central America, reached an advanced stage in the history of writing, but could not get beyond the transitional stage. A few peoples (the ancient Cypriotes, the Japanese and others) developed a syllabary. But only the Syro-Palestinian Semites produced a genius who created the alphabetic writing, from which have descended all past and present alphabets " (p. 215ff).

It is not possible, of course, to comment here in detail upon the author's views. A few remarks may, however, be made. In the first place, though his treatment of the Sinaitic theory of the origin of the alphabet is brief, Dr. Diringer does good service in showing that, despite weighty opinion in favour of the theory, there are difficult questions yet to be answered with certainty before the theory can be said to have been proved. For example, has the acrophonic principle of the Sinaitic script been established ? Does the script represent an alphabetic writing ? Is the language of the inscriptions Semitic ? (p. 200). Different answers to these questions are given by different scholars, and it is inevitable that it should be so. For satisfactory answers to these questions can only be given when something like agreement has been reached on the decipherment of the script. Here Dr. Diringer is justified in the view that the inscriptions do not provide

sufficient material for the purpose—indeed he believes that the word *ba'alat*, deciphered by Gardiner as long ago as 1916, still remains the only word whose decipherment is probable (p. 201). Secondly, with regard to Dunand's view that the pseudo-hieroglyphic script of Byblos represents the prototype of the alphabet, Dr. Diringer has had the advantage of being able to publish some notes of two communications made on this subject to the Académie des Inscriptions by E. Dhorme, and also some notes which Dhorme himself sent him. From these notes we may learn that Dhorme claims to have succeeded in determining the syllabary of this unknown script, and in defining the language it represents as Phœnician ; that he ascribes the documents to c. 1375 B.C. ; and that he is in disagreement with Dunand on the problem of the origin of the alphabet (p. 164). When this book was written, Dhorme's decipherment had not been published. That Dr. Diringer should hesitate to express any definite opinion on this question is therefore only to be expected. Dhorme's decipherment has since appeared in *Syria*, Vol. xxv (1946–1948), pp. 1–35 (this volume also contains an article by R. Dussaud, *L'origine de l'alphabet et son évolution première, d'après les découvertes de Byblos*, pp. 36–52), and we may hope that we may hear further from Dr. Diringer on this new material. And lastly, other scholars, besides Dr. Diringer, for example J. A. Montgomery, have discovered in the land of Canaan an " arena of a welter of competing essays at writing " (see *Record and Revelation*, ed. H. Wheeler Robinson, 1938, p. 9), and this approach to the problem has its attractions. While it is not possible to say that Dr. Diringer's views as to the place and time of the origin of the alphabet are susceptible of proof—he would be the last to claim that they are—he has, within the limits he has set himself, stated his position clearly, indeed persuasively. Whether or not his position can be sustained, future research, and future discoveries, must show,

Another matter on which the reader may care to be informed is the unique place the author gives to the Greek alphabet in the history of writing. That the Greeks adopted

the Semitic alphabet from the Phœnicians—at the end of the second millennium, according to Dr. Diringer (p. 219)—is commonly agreed. But in adopting it, they " transformed the consonantal Semitic script into a modern alphabet, and gave it symmetry and art. Through its direct and indirect descendants, the Etruscan and Latin alphabets on the one hand, and the Cyrillic alphabet on the other, it has become the progenitor of all the European alphabets " (p. 461). The special place which Dr. Diringer gives to the Etruscan alphabet—the main offshoot, according to him, of the Greek alphabet—is striking. Their alphabet is, he thinks, the link between the Greek and Latin alphabets, and is the prototype of all modern alphabets of Western Europe (p. 489). That our own alphabet should have reached us through an Etruscan medium is one of the surprises to which Dr. Diringer treats us.

Reviewers of this book, whose scope embraces the alphabets, ancient and modern, of the world, will tend naturally to turn more particularly to those parts of it which deal with their own special interests. The student of the Near East will find much in it to interest and inform him. We note, for example, the distinction the author draws between the national character of the Egyptian scripts and the international character of cuneiform writing (p. 63) ; his explanation of the origin of Hittite hieroglyphic writing—the expansion of the Hittite empire, he thinks, created a need for a monumental script for writing on stone, and the pictorial script which the Hittite rulers decided upon reflects their susceptibility to the beauties of Egyptian writing, with which they were familiar (p. 95) ; his belief that the South Semitic alphabets originated some centuries later than the North Semitic script, which was known to the Southern Semites, and which probably formed the basis of their new script (p. 230) ; his suggestion that, while the Ethiopic script is as a whole a gradual development of the South Semitic alphabet, the introduction of vocalization into it was effected by a single person, perhaps under the influence of the Greek alphabet (p. 231) ; the curious fact that the Aramaic lan-

guage and script had little importance while the Aramaic states existed, and that the majority, and the most important, of Aramaic inscriptions have been found outside Syria and Palestine (p. 257) ; his opinion that the ancient Hebrew script on Jewish coins of the Maccabaean age does not represent an artificial revival of an obsolete script, but is rather to be explained on the supposition that the early Hebrew alphabet continued to be used among certain sections of the population (p. 243) ; and the view that the Mandæan script may have descended from a cursive Aramaic script similar to that which was the parent of the Nabatæan, influenced, however, by the Syriac script (p. 291). More generally, we may note the author's adoption of the " low chronology " (*e.g.*, p. 49f, 59), and the use he makes of the theory of " idea-diffusion " or " stimulus-diffusion " (*e.g.*, p. 54, 58, 95). Very interesting too are the author's frequent references to the part played by missionaries and churches in the history of the alphabet (numerous references may be found under the entry " Alphabet follows religion " in the index, p. 578).

Even though only a part of this book has been touched on in this review, it is hoped that the reader will by now have gained some idea of its extraordinary interest and scope, and of the wide learning the author displays. It is never very easy to write, as Dr. Diringer writes, for the scholar and the ordinary reader at one and the same time. The former can always do with more, the latter usually with less. The scholar will inevitably regret, for example, the absence of specific references to statements that are made, for it is not always clear from the bibliography provided where they may be pursued. He will regret again that considerations of space have made it impossible for the author to discuss more fully some of the matters on which a different opinion may be held. For example, with regard to the ancient Hebrew script on Jewish coins of the Maccabaean age, to which reference has been made, the view which the author rejects seems to the present writer at least as likely as the view he adopts. Again, we may doubt whether a derivation of the

word " Estrangelo " which connects it with " Evangelium " is more probable than one which connects it with the Greek *strongyle*, the " round (script) " (p. 284f). But where so much is given, it is perhaps ungracious to ask for more. And, after all, Dr. Diringer's book is intended as an introduction to the subject. The scholar will in any case rejoice that the author, in catering for his needs, has made available also to a wider public the fruits of the labours of scholars the world over. The work involved in collecting and sifting the vast mass of material, and in presenting it, with his conclusions, to the reader, must have been prodigious, even allowing for the fact that in his earlier book in Italian the author had available to him what might be regarded as a first draft of the present volume. The result bears ample testimony to his ability. While he has had of necessity to rely to a great extent upon the work of others—in his introduction he modestly disclaims any degree of originality—he can, as has been indicated, arrive at an independent judgment even in the face of weighty opposition. His handling of the evidence before him is marked by an admirable restraint. As for the evidence itself, it would be difficult to think of anything of importance that has escaped his notice. The bibliographies, which are intended for the student rather than the ordinary reader, make no claim to completeness—further literature on the subject may be sought in the author's Italian work—but they are none the less on a generous scale. The numerous plates —and here the liberality of the publishers in this respect is to be commended—are well chosen ; occasionally, however, the author's choice would not be one's own ; for example, Ostracon II from Tell ed-Duweir is much superior calligraphically to Ostracon IV, which the author has selected to illustrate the script of these ostraca (p. 240). There are some passages where the English style of the author reads curiously. But they are few. For the rest we can only admire the author's achievement in writing so well in a language that is not his native tongue upon a subject so complicated and technical.

This book will, it is safe to say, remain the standard work

in English on the alphabet for many years to come. Sir Ellis Minns concludes his Foreword with the remark—" At last we have in English a worthy successor to Isaac Taylor " (p. xii). With this remark we may cordially agree. In his preface Dr. Diringer informs us that we may expect a further book from him. This is welcome news, and it is to be hoped that he may find an opportunity to discuss in it more fully some of those problems which in this book are dealt with all too briefly.

There are some errors which need correction. For example, Mercer's initials are S.A.B., not S.H.E. (p. 56) ; " teracotta " is an error for " terra-cotta " (p. 120) ; " Waddel " (p. 197) for " Waddell " ; " eight " (p. 223, line three from bottom) for " eighth " ; " Sabaeans " (p. 226) for " Sabaeas " ; the letter " r " is missing from Fig. 118, 1 (p. 241) ; " Meisler " (p. 261) is an error for " Maisler " ; " Genirah " (p. 261) for " Genizah " ; " g " and " d " should be added to the letters " b,k,p,t " (p. 266) ; " Naharain " (p. 254) is an error for " Naharaim " ; Fig. 134, 1 (p. 273) is printed upside down ; Syriac *melka* (p. 288) is an error for *malka ;* and the date of Burkitt's Schweich Lecture is 1926, not 1929 (p. 293).

D. Winton Thomas.

Tell En-Nasbeh. Excavated under the direction of the late William Frederic Badè, by Chester Charlton McCown with contributions by James Muilenberg, Joseph Carson Wampler, Dietrich Von Bothmer and Margaret Harrison. The Palestine Institute of Pacific School of Religion and the American Schools of Oriental Research. Berkeley and New Haven, 1947.

Field reports on excavations in the Near East have always shown bewildering differences in format and presentation of contents. This lack of uniformity has seriously impaired the value of many publications in the past, for the essence of archæological method is comparison ; and where material

is unevenly recorded, with emphasis on certain aspects and a total disregard of others, a true balance of evidence is impossible.

To those few whose unenviable task it is to prepare field reports, the authors of the two volumes on Tell en-Nasbeh, who have so faithfully interpreted the notes and records of the late Dr. W. F. Badè, provide a model of concise arrangement and unbiassed reasoning, while the larger group which needs to study such reports will find the subjects of particular interest to them readily accessible and lucidly described. If the general reader should happen to open the pages of this attractively bound book, he will not find himself forgotten, for the material is so arranged that Volume I deals with the " Archæological and Historical Results ", and he need not probe further than Part I to get an idea of the excavations on the site in relation to its history. Part II in the same volume presents the " Chronological Data and Problems " and Part III assembles the " Materials of Cultural Significance ". Volume II is entirely devoted to the pottery.

The excavations took place during five years between 1926 and 1935, and at the end of that time, Tell en-Nasbeh was the most completely excavated site in Palestine. The chief feature of the city was the massive stone wall enclosing an area of 32,000 sq. m., or slightly less than eight acres. Though other fortifications were built to defend much larger towns, the ramparts and walls at Tell en-Nasbeh give the appearance of greater strength, particularly on the east and west sides. Nine or ten rectangular towers, spaced at frequent intervals project from the line of the wall, increasing the masonry to between six and nine metres in width, and there was besides an extensive glacis to protect the foundations from erosion and assault.

The denudation of the central part of the mound has removed all traces of the main administrative buildings and their contents ; nevertheless the site has amply rewarded the meticulous care expended on it by the excavators and has produced many small objects of daily use besides a wealth of pottery. The beautiful seal of Jaazaniah (p. 57) already

published by Dr. Badè is still one of the finest examples of the lapidary's skill yet found in Palestine. It is not unusual to find in non-Egyptian publications that, as in Fig. 34, the printer has misplaced the drawings 1 and 2 of the well-known " Eye of Horus " amulet.

Since the publication includes many matters for discussion, and space is limited, let us concentrate on a few points of special interest to readers of the Quarterly.

Pottery is the common denominator of archæological study, and it is indeed disturbing that no generally accepted scheme for the classification and description of pottery has yet been evolved. There are so many points of detail—section on right or left of drawing, scales and conventions of all kinds—which could surely be settled, though some of the larger questions would naturally lead to marked divergence of opinion.

Mr. Wampler, for instance, in the Introduction to Volume II, gives very sound reasons for rejecting the system of " typing " similar forms to a limited series of key drawings. He has presented the reader with over 1,800 outlines, occupying 79 plates, but it is an additional complication, beyond his control, that most of the forms are incomplete. On the basis of form alone, the reader is thus in a position to make an independent judgement, which is undoubtedly in the interests of objective criticism, but it is unfortunately a costly method using much valuable space, and it cannot be employed when funds are limited.

Bowl shapes are notoriously difficult to classify and are equally unsatisfactory to date, so that it is not surprising that Mr. Wampler finds himself involved in many complexities, though he is confident that a possibility of chronological distinction does exist if new considerations—such as the technical progress of throwing and turning—receive more attention. Mr. Wampler makes the point on p. 47, which the reviewer heartily endorses, that it is the frequency of a shape rather than its mere occurrence which is significant, and the danger of overstressing single examples has also been emphasized by Dr. Garstang.

Without making a detailed analysis or comparison of the pottery as a whole, there would seem to be a very striking resemblance between the ceramics of this northern stronghold of Judah and those of its southern counterpart at Tell ed-Duweir. If it is assumed that Tell en-Nasbeh is indeed Mizpah and Tell ed-Duweir can be identified with Lachish, then these are the places mentioned in I Kings xv, 16–22 and II Chronicles xi, 9, where it is stated that both cities were fortified by Kings of Judah, Lachish by Rehoboam about 926 B.C. and Mizpah by his grandson Asa.

There is no evidence of destruction by fire at Tell en-Nasbeh ; on the evidence of the pottery, the city seemed to enjoy its greatest prosperity towards the close of the monarchy, and during the post-exilic period, when there was an active and populous township at Tell en-Nasbeh. The story was very different at Tell ed-Duweir, where two violent burnings had followed close on each other, and a fraction of the former population lived within the city walls. Certainly the pottery suggests a later trend at Tell en-Nasbeh ; with the exception of the handleless conical jars illustrated on pl. 27, all the main types are recorded at both places, but the frequency of late types at Tell en-Nasbeh is very marked.

There could be no better indication of the unified control in force throughout Judah, even in the last troubled century of the kingdom, than the similarity of pottery and the remarkable series of stamped jar handles from both sites, separated from each other by the length of the land.

The whole problem of the stamped jar handles is still in the balance, and every major question connected with them still awaits an answer. Of the four place-names mentioned, only Hebron is located with certainty. Ziph and Sokhoh have been tentatively identified with sites in the hills east and south of Hebron, but Memshath is quite uncertain—if an attempt to place it at Mareshah is excluded. Apart from Hebron the three other towns played no great part in history, so how did they become important as " royal " centres ?

Were they receiving stations for taxes ? If so, they would have been evenly spaced throughout the country, and not

confined to the sparsely populated hills. Were they royal potteries? Surely the same regional distribution would be required to avoid long distance transport. Were they royal vineyards? In my opinion this is a likely solution. It would cover the probability that the sites were all in the wine growing district, and that the jars bearing the stamps found their way to every part of Judah.

But the important fact emerging from a study of the helpful chart on p. 161, which may ultimately provide the vital clue to the solution of the question is the proportional representation of the three types between Tell en-Nasbeh and Tell ed-Duweir, for these two sites provide the greatest number of examples. While 85.48 per cent. of all those discovered at Tell ed-Duweir were classed as beetle stamps, the percentage for this type was only 17.44 per cent. at Tell en-Nasbeh, and the figures are reversed for the so-called sun disk stamps, giving 82.56 per cent. at Tell en-Nasbeh and 14.52 per cent. at Tell ed-Duweir. (It should be stated that Dr. Diringer is preparing a chart for publication in Lachish III with revised percentages based on the total figure from all sites of 550 examples, but the result is accentuated without being changed; it should fulfil Dr. McCown's wish for full statistics expressed on p. 160.)

Is the distance between the source of origin of these stamps and the place of their discovery any criterion? I do not think so; for all the sites where Hebron stamps have been found fall within much the same radius of that city, yet the proportions of these stamps are very different: 92.3 per cent. at Ain Shems, 71 per cent. at Tell ed-Duweir, 36.1 per cent. at Tell en-Nasbeh and 23.5 per cent. at other tells in the Shephelah.

Is the distinction chronological? Dr. McCown writes (p. 160): "As to date no distinctions are possible at either TN or Tell ed-Duweir between less and more highly stylized types or between beetle and sun disk types. Also whether they may possibly have come into use before 700 B.C. is still an open question so far as the sites listed have given evidence".

But the epigraphists are prepared to make a finer division. Professor W. F. Albright has already accepted Dr. Diringer's chronological classification of the groups and has gone further and dated them as follows : (1) beetle i, 714–686 B.C., time of Hezekiah ; (2) beetle ii, 686–641 (Manasseh) ; and (3) the two-winged sun disk or scroll, 639–589 B.C. (Josiah and his successors).

If this scheme could be proved, it would achieve very close dating for all the late strata in Judæan cities, and of Tell ed-Duweir and Tell en-Nasbeh in particular.

The capacity of the standard jars bearing the " royal " stamps has recently received attention in these columns (PEQ 1941, 106–109) and in Tell Beit Mirsim III (p. 58 and 75). Dr. McCown adds an interesting contribution from Tell en-Nasbeh, p. 260–261, where an incomplete jar bearing stamps on all four handles was found.

The body of the vessel as mended, shown in the photo on plate 103, appears identical in form with the typical jar at Duweir, but the tentative restoration (drawing on Fig. 70) of the Tell en-Nasbeh example does not give at all the same impression, for the length from the rim to the top of the handle is a quarter of the whole, while at Tell ed-Duweir it is about a fifth for the same measurement. The plain sloping rims are typical at Tell ed-Duweir, and these may be represented at Tell en-Nasbeh by such fragments as S. 254, 276, 282–284, 294, though they are by no means exact parallels.

The able team enlisted by Dr. C. C. McCown have all contributed valuable sections to a noteworthy report on field excavations ; they have, moreover, put future writers in their debt by the provision of exceptionally full notes on the correlation and comparison of their discoveries with those of other expeditions.

OLGA TUFNELL.

Southern Palestine. Geological Map with Explanatory Notes. By S. H. Shaw, F.G.S., &c., Government Geologist. Published by the Survey of Palestine. 1947. 12*s*.

The area described is bounded on the north by an east-west line running about 20 miles south of Beersheba and about 5 miles south of the southern end of the Dead Sea. To the south it extends as far as the Gulf of Aqaba. The eastern limit runs through Ma'an, and the western is some 36 miles to the west of Aqaba. The area thus includes portions of Palestine, Trans-Jordan and Sinai (Egypt). The author states that " the area shown on this sheet covers some 7,650 square kilometres in Palestine and 8,850 kilometres in Trans-Jordan, and comprises some of the most inaccessible parts of these countries." The total of these two areas is somewhat more than 6,000 square miles. The map is on the scale of 1 : 250,000, or about 4 miles to one-inch.

Mr. Shaw expresses his thanks for the R.A.F. air photographs, on the scale of about 1 : 50,000, of the whole of the Palestine area, and the remarks that "these have been a particularly valuable source of information as the structure of the country is very clearly shown on them " and it is possible to distinguish on these photographs between the principal geological formations.

Geological information over the Negeb was largely derived from the work of the Petroleum Development (Palestine) Company. As to Trans-Jordan, there has been no regular, official geological investigation there, but occasionally official Palestine geologists have visited that country, both for the purpose of completing their studies in Palestine and assisting the Trans-Jordan authorities on specific questions. As a result, a considerable amount of geological information has been obtained ; but the topographical mapping of that country is still mainly in the reconnaissance stage.

Mr. Shaw has rightly made use of the geological labours of many of his predecessors in that field, and he gives a list

of authorities consulted, including, in particular, the extensive work of the late Mr. G. S. Blake and of Mr. L. Picard, the latter of the Hebrew University. It is sad to have to remind ourselves of the fact that Mr. Blake was murdered by bandits in 1940, whilst he was investigating the geology of the Dead Sea area.

The most striking feature of the map is the great wedge of granites, between two faults, just east of the western boundary of Trans-Jordan, stretching northwood for sixty miles from the neighbourhood of Aqaba. And the next most noticeable feature is the predominance, over most of the sheet, of cretaceous rocks with over-lying tertiaries. A section is given, on the margin of the map, which shows clearly the general structure, but the details can best be studied from the map itself, and from the clear explanatory notes which form a booklet of 42 pages.

In an account of the surface features, the author divides the area into, the hill region of the Negeb, the Wadi Araba, and the High Plateau of Trans-Jordan, the Wadi Araba forming a continuation of the Dead Sea—Jordan Valley rift. " The rocks as at present revealed are folded into a series of asymmetrical anticlines or monoclines, having their steep flanks to the south-east and their axes making an oblique angle of about 30° " with the direction of the rift.

Many detailed vertical sections are given in the " Notes," one by G. S. Blake, and the rest by the writer, Mr. Shaw, and by the Petroleum Development Company. There are some twenty of these sections giving a mass of information of the succession of rocks through considerable thicknesses of the crust. Mr. Shaw states that " the area is practically without any mineral deposits of economic value under present conditions," though he gives information as to indications of manganese and phosphates in Trans-Jordan. There is a cautious paragraph about petroleum, the prospects being " definitely problematical as far as structures in the Southern part of the country are concerned."

Maps and memoirs of this description are the fruit of much work both outdoor and indoor. They depend upon the

labours of explorers and topographers, of photographers from the air, and, above all, of field geologists, who lead what has been called a rough, scrambling life and, it may be added, sometimes a dangerous one. Mr. Shaw gives us the most reliable account at present available of the geology of Southern Palestine and Trans-Jordan, and his work will be valued by all who wish to study the natural conditions of that desolate region.

It may be of some interest to recall the geological expedition of 1883, which was financed and organized by the Fund. The expedition was placed under the direction of Professor E. Hull, F.R.S., and the other members of the party were his son, E. G. Hull, H. C. Hart a botanist, and R. Lawrence a meteorologist. Kitchener accompanied the party, with George Armstrong, and these two carried out a trigonometrical and topographical survey of the Wadi Araba. They all travelled together for most of the time, the route taken being from the coast opposite Suez to the traditional Mount Sinai, and then northward along the Wadi el Ain to Aqaba and the Wadi Araba.

Professor Hull published in 1885 a popular account of the journey under the title *Mount Seir*. The formal *Memoir on the Geology and Geography of Arabia Petrea, Palestine, etc.*, was published by the Fund in 1886. It is a quarto volume of 145 pages with two geological maps in colour, the important map being that of the Wadi Araba, towards the end of the book. A comparison of Hull's map with that described above shows, very generally, the same geological picture of the Wadi Araba, but Hull's geology of the Negeb is a mere sketch, and all his work is now superseded by Mr. Shaw's. Hull gives a long list of books on the geology and geography of the region, all these having been published before 1883. Hull's party was only in the country for about three months and their work was of a good reconnaissance type. His small book on *Mount Seir* contains an interesting appendix by Kitchener.

C. F. Arden-Close.

The Committee have to acknowledge with thanks the following :—

Journal of the Royal Society of Antiquaries in Ireland, Vol. 77, Part 2, December, 1947.

Antiquaries' Journal, Vol. 28, Nos. 1 and 2, January–April, 1948.

Bible Lands, Vol. 11 : No. 18, April, 1948 ; No. 19, July, 1948.

Expository Times, Vol. 59 : No. 7, April, 1948 ; No. 8, May, 1948 ; No. 9, June, 1948 ; No. 10, July, 1948 ; No. 11, Aug., 1948.

Transactions, Royal Canadian Institute, Vol. 26, No. 56, Part 2, 1947.

Proceedings, Royal Canadian Institute, Series 3A, Vol. 12, 1946–47.

Biblica, Rome, Vol. 29 : Nos. 1 and 2, 1948 ; No. 3, 1948.

Harvard Theological Review, Vol. 41 : No. 1, January, 1948 ; No. 2, April, 1948.

Revue Biblique, Vol. 55 : No. 1, January, 1948 ; No. 2, April, 1948.

Syria, Vol. 25, Nos. 1 and 2, 1946–48.

Jewish Quarterly Review, Vol. 38, No. 4, April, 1948 ; Vol. 39, No. 1, July, 1948.

Pennsylvania University Bulletin, Kramer, Iraqi Excavation, Vol. 13, No. 2, March, 1948.

New Judæa, March–April, 1948 ; May, 1948.

Journal of Egyptian Archæology, Vol. 3, No. 3, December, 1947.

Nouvelle Revue Théologique, Vol. 70 : No. 4, April, 1948 ; No. 5, May, 1948 ; No. 6, June, 1948 ; No. 7, July–August, 1948.

Department of Surveys, Palestine Report, Vol. 194, No. 46, March, 1948.

Geographical Review, April, 1948 ; July, 1948.

Religions, No. 63, May–August, 1948 ; No. 64, September–December, 1948.

Bible Archæological Digest, Vol. 3 : No. 1, January–March, 1948 ; No. 2, April–June, 1948.

Journal of the American Oriental Society, Vol. 68 : No. 1, January–March, 1948, Supplement No. 7, January–March, 1948 ; No. 2, April–June, 1948.
Annual Report, British School of Archæology in Greece, Offprint, Vol. 66, 1946–47.
Scottish Geographical Magazine, Vol. 64, No. 1, April, 1948 ; Vols. 62 and 63, Index, 1947.
Al Mashriq, Beyrout, Vol. 41, No. 4, October–December, 1947.
Journal of Near Eastern Studies, Vol. 7, No. 1, January, 1948 ; No. 2, April, 1948.
Ex Oriente Lux, Jaarbericht No. 10, 1945–1948.
American Journal of Philology, Vol. 69, No. 274, April, 1948.
Transactions of Victoria Institute, Vol. 78, 1946.
Bulletin of the American Schools of Oriental Research, No. 110, April, 1948.
Traditio, Vol. 5, 1947.
American Journal of Archæology, Vol. 51, No. 4, October–December, 1947. Index, 1947.
Annals of Archæology and Anthropology, Vol. 28, 1948.
News of the Yivo, No. 27, June, 1948.
American Congregational Association, 95th Annual Report, 17th May, 1948.
Antiquity, No. 87, September, 1948.
Megiddo II, Seasons of 1935–39, Vol. 62, 1 Vol. Text, 1 Vol. Plates. By Staff of the Megiddo Expedition.
The Alphabet. By Dr. Diringer.
Qobes, dedicated to A. S. Weizmann. By S. Yeivin.

HARRISON AND SONS, LIMITED,
PRINTERS TO HIS MAJESTY THE KING,
LONDON : HAYES (MX.) : HIGH WYCOMBE

PALESTINE EXPLORATION FUND

ANNUAL REPORT

AND ACCOUNTS

WITH

LIST OF SUBSCRIPTIONS

FOR THE YEAR 1948

PALESTINE EXPLORATION FUND
2 HINDE STREET, MANCHESTER SQUARE, LONDON, W.1

THE PALESTINE EXPLORATION FUND

SOCIETY FOR THE ACCURATE AND SYSTEMATIC INVESTIGATION OF THE ARCHAEOLOGY, THE TOPOGRAPHY, THE GEOLOGY AND PHYSICAL GEOGRAPHY, THE MANNERS AND CUSTOMS OF THE HOLY LAND, FOR BIBLICAL ILLUSTRATION.

FOUNDED 1865.

PATRON—HIS MAJESTY THE KING.

PRESIDENT—HIS GRACE THE ARCHBISHOP OF CANTERBURY.

VICE PRESIDENTS—HIS GRACE THE ARCHBISHOP OF YORK;
THE RT. REV. THE BISHOP OF LAMUS (BISHOP AUXILIARY OF WESTMINSTER);
SIR HENRY DALE, O.M., G.B.E., F.R.S.;
THE VERY REV. THE CHIEF RABBI;
THE DIRECTOR OF THE ISLAMIC CULTURAL CENTRE

The Society was established on the basis of the following rules:—

1. It was not to be a religious society. That is to say, it should be pledged not to advocate or attack any form of creed or doctrine.
2. It was not to adopt or to defend any side in controversial matters.
3. It was to be conducted on strictly scientific principles.

These rules have been jealously observed. The Society's organ, the PALESTINE EXPLORATION QUARTERLY, is open to all opinions, while it records as facts only the actual discoveries and results of its exploring officers. Although the Society is not a religious society, strictly so called, its work necessarily possesses unusual interest for Bible Students of all denominations, who find in the results obtained by exploration much that confirms and illustrates the historical truth of both the Old and New Testaments. In the course of its existence, the Society, with limited funds at its disposal, has done an immense amount of work, and published the results in books, papers, maps, plans and photographs, primarily for the benefit of its subscribers, and for the advantage of students of the Sacred Scriptures.

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Chairman—J. W. CROWFOOT, Esq., C.B.E., F.S.A.
Hon. Treasurer—MISS KATHLEEN KENYON, M.A., F.S.A.
Hon. Secretary—REV. C. B. MORTLOCK, M.A., F.S.A.

SIR CHARLES ARDEN-CLOSE, K.B.E., C.B., C.M.G., F.R.S.
MISS ESTELLE BLYTH
COL. G. G. S. CLARKE, R.E.
PROF. STANLEY A. COOK, LITT.D., F.B.A.
O. G. S. CRAWFORD, Esq., M.A., F.S.A.
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D. DIRINGER, Esq., D.LITT.
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PROF. D. WINTON THOMAS, D.D.
MISS OLGA TUFNELL
JOHN WAECHTER, Esq., Ph.D., F.G.S.

Assistant Secretary—MISS R. O. WINGATE, M.A.
Office—2 Hinde Street, Manchester Square, W.1.
Bankers—MESSRS. COUTTS AND CO., 16 Cavendish Square, London, W.1.
Auditors—MESSRS. TURQUAND, YOUNGS, MCAULIFFE AND CO., *Chartered Accountants*, 19 Coleman Street, London, E.C.2.

The privileges of Subscribers are as follows:—Annual Subscribers of *One Guinea* (£1 : 1 : 0), or more, will receive the PALESTINE EXPLORATION QUARTERLY, and can purchase other publications of the Fund and of the British School of Archaeology in Jerusalem at reduced prices. Annual Subscribers of not less than *Two Guineas* (£2 : 2 : 0) to either the Palestine Exploration Fund, or the British School of Archaeology in Jerusalem, or of One Guinea to each, will receive the QUARTERLY and the Memoirs and Annuals of both institutions as published, gratis.

SUBSCRIPTIONS AND INCOME TAX. Subscribers who covenant to pay their subscriptions regularly for a period of seven years to cease at death, enable the Fund to benefit by the recovery of Income Tax thereon at no cost to themselves. A suitable form of Covenant can, if desired, be obtained by application to the Secretary.

Subscribers in the United States of America may remit to the National City Bank, 55 Wall Street, New York, with instruction to credit Messrs. Coutts & Co., or Palestine Exploration Fund.

PALESTINE EXPLORATION FUND

ANNUAL REPORT FOR THE YEAR 1948

THE Executive Committee has the honour to report that Sir Henry Dale, O.M., G.B.E., F.R.S., the Right Reverend the Bishop of Lamus, Bishop Auxiliary of Westminster, the Very Reverend the Chief Rabbi and the Director of the Islamic Cultural Centre have become Vice-Presidents of the Fund.

Professor G. R. Driver has been appointed Vice-Chairman, and Colonel G. G. S. Clarke, R.E., and Dr. D. Diringer have been appointed additional members of the Executive Committee.

In Palestine, the Mandate came to an end last May and the British members of the Department of Antiquities who had had such close relations with the Fund were evacuated, with the exception of the Curator of the Palestine Archaeological Museum who remained for a few months longer in the Middle East to complete arrangements for the safeguarding of the collections. When he also returned to England, Mr. G. L. Harding of the Department of Antiquities in Amman, was appointed Acting Curator of the Jerusalem Museum and the Fund has been in constant communication with him.

In spite of the difficulties and dangers attending travel in these parts, Mr. Harding has made important discoveries, both in Transjordan and Palestine, which the Fund is shortly to publish. The last of these concerns the cave near the Dead Sea where some Hebrew Texts about which much has appeared in the Press have been found. The cave, which was identified by an officer in the Arab Legion, has been explored by Mr. Harding and we hope to print his report in the next number of the *Palestine Quarterly*. It confirms the authenticity of the manuscripts, which had been called in question owing to the manner in which they had been placed on the market.

At home the retirement of our Assistant Secretary, Mr. G. H. Ovenden, at the end of a very long period of faithful service, must have come as a shock to many subscribers. It is nearly fifty years since Mr. Ovenden was first appointed as a boy clerk in the office at a time when there were still some survivors of the old survey, and he had been Assistant Secretary since 1916. There was little about the early organisation and activities of the Fund with which he was not familiar and he was ever ready to place all he knew at the disposal of enquirers. At the Annual Meeting last year a presentation was made to Mr. Ovenden by members of the Executive Committee. He had decided for some time to make his home in New Zealand and left England last summer with our best wishes for the future.

The new arrangements in the London office which were described in the last report were completed satisfactorily before Mr. Ovenden's departure, and we think that members generally are pleased with them.

The re-arrangement of the Library also is virtually complete, thanks to the energy of Miss J. du Plat Taylor and Miss Marshall, and arrears in the binding of journals long overdue have at last been made good.

Six lectures were given in the course of the year. On February 18, Professor Winton Thomas lectured on the *Lachish Ostraka*. On March 31, Mr. G. E. Kirk lectured on *European Penetration of the Near East*. On May 5, Mr. Cecil Roth lectured on *Palestine Archaeology*. The Annual Meeting was held on June 28, when Sir Edwin Drower took the Chair and a lecture was given by Mr. R. W. Hamilton on *Recent Discoveries at Khirbet Mefjer*. On November 17, Professor M. E. L. Mallowan lectured on *Brak and Chagar Bazar*, and on December 14, Dr. O. R. Gurney lectured on *Hittite Religion*.

The Committee desire to express their thanks for the following contributions to the pages of the *Palestine Exploration Quarterly*: "Some New Seleucid Coins, II" by Mrs. S. Ben Dor,; "Mistranslations", by Professor G. R. Driver; "Recent Discoveries in Transjordan", by G. L. Harding; "Discoveries in Palestine since 1939", by C. N. Johns; "New Light on the Negev in Ancient Times" by N. Lewis; "Salem", by C. Mackay; "King Solomon's Temple and other Buildings and Works of Art", by Sir John Myres; "The Route of the Exodus, the First Stage", by Group-Captain L. W. B. Rees, V.C.; "Ostracon III, 13-18 from Tell ed-Duweir", by Professor D. Winton-Thomas; "Officials of the Cult at Ugarit", by D. M. L. Urie.

Subscribers will observe that of the balance in hand of £622 12s. 2d. at the end of 1947, £400 has been invested, including the sum of £90 held on behalf of the Archaeological Survey of Palestine, which has not yet been resumed. This balance represents accumulations during the war years which will be called upon as soon as conditions in Palestine permit the resumption of full activities. The ordinary income only just balances our expenditure, and the Executive Committee urges members to increase the resources of the Fund, both by bringing in new subscribers and by signing covenants which will enable income tax to be recovered and so nearly double the value of their subscriptions. The Fund must have the resources to undertake fresh work in Palestine as soon as opportunity arises. The only other item in the Accounts calling for attention is the increased expenditure on the Library, necessitated in bringing it up to date and carrying out arrears of binding. Much of the expenditure is non-recurrent, and members will find the usefulness of the Library much increased.

Signed on behalf of the Executive Committee, { J. W. CROWFOOT, *Chairman*. C. B. MORTLOCK, *Hon. Secretary*.

May, 1949

PALESTINE EXPLORATION FUND, 1948

BALANCE SHEET, 31ST DECEMBER, 1948

	£ s. d.	£ s. d.
CAPITAL:—		
Authorized—200 Shares of £1 each	200 0 0	
Issued—10 Shares of £1 each, not called		—
SURPLUS OF ASSETS OVER LIABILITIES		
(Excluding donated property) as per last Balance Sheet	3,544 4 6	
Less: Excess of Expenditure over Income for year	1 1 2	3,543 3 4
CURRENT LIABILITIES:—		
Sundry Creditors for Current Expenses	104 5 3	
Archaeological Survey of Palestine	91 13 3	
Subscriptions in Advance	18 7 6	
		214 6 0
		£3,757 9 4

	£ s. d.	£ s. d.
FIXED ASSETS:—		
Freehold Property—Donated—No. 2 Hinde Street (estimated value £5,000) ...		
Alterations and Improvements No. 2 Hinde Street, at net book value 1st July, 1948 ...		1,188 17 5
Museum, Library and Storeroom, Fixtures, Fittings, Furniture, etc., at net book value 1st July, 1948		382 2 7
Typewriter at cost	39 0 0	
Less: Amount written off	19 0 0	
		20 0 0
Jewish Colonial Trust—Donated—50 Ordinary Shares of £1 each, fully paid ...		—
		1,591 0 0

	£ s. d.	£ s. d.	£ s. d.
CURRENT ASSETS:—			
Stock of Publications, Maps, Books, Models, Lantern Slides, Library and Antiques		—	
Sundry Payments in Advance		50 0 0	
Subscriptions in arrear		36 9 9	
Investments—Post Office Issue—	£ s. d.		
£374 12 0 3½ per cent. Conversion Stock ...	400 0 0		
50 0 0 3 Savings Bonds	50 0 0		
300 0 0 3 per cent Defence Bonds ...	300 0 0		
700 0 0 2½ per cent Defence Bonds (Conversion Issue)	700 0 0		
		1,450 0 0	
Cash at Bank and in hand	* 114 5 7		
Post Office Savings Bank	515 14 0		
		629 19 7	
			2,166 9 4
			£3,757 9 4

* Includes £25 donated in 1939 and not yet expended for the purchase of Committee Table in memory of the late H. Coote Lake, Esq.

J. W. CROWFOOT, *Chairman.*
KATHLEEN M. KENYON, *Hon. Treasurer.*

RECEIPTS AND PAYMENTS ACCOUNT
FOR THE YEAR ENDED 31ST DECEMBER, 1948

RECEIPTS	£ s. d.	£ s. d.
To Balance—31st December, 1947—		
At Bank and in hand	622 12 2	
Post Office Savings Bank	500 0 0	
		1,122 12 2
,, Subscriptions and Donations including Local Societies	428 4 11	
,, Subscriptions in advance	18 7 6	
,, Archaeological Survey of Palestine	60 6 7	
,, Refund of Income Tax on Covenanted Subscriptions	76 7 10	
,, Sale of Publications	139 1 10	
,, Rents	550 0 0	
,, Dividend on £50—3 per cent Savings Bonds	1 10 0	
,, Dividend on £1,000—3 per cent Defence Bonds	30 0 0	
,, Premium on conversion of Defence Bonds	7 0 0	
,, Interest on Post Office Savings Bank	15 14 0	
,, Hire of Slides	5 0	
		1,326 17 8
		£2,449 9 10

PAYMENTS	£ s. d.	£ s. d.
By Printing—Quarterly	433 3 1	
Leaflets and Lecture cards	16 19 6	
Samaria-Sebaste	14 13 3	
Annual Report	13 9 6	
		478 5 4
,, Library and Librarian	... ...	177 19 0
,, Repairs	... ...	32 1 10
,, Salaries, Wages and Pension (including National Insurance) ...	... ...	510 15 7
,, Postages and Telephone	... ...	36 12 2
,, Insurance	... ...	15 3 8
,, Rates	... ...	18 12 0
,, Lighting and Heating	... ...	32 8 8
,, Stationery and Sundries	... ...	45 2 3
,, Lectures and Lantern Slides	... ...	5 17 9
,, Cheque Books	... ...	16 0
,, Legal Charges	... ...	21 11 0
,, Audit Fee	... ...	5 5 0
,, Typewriter	... ...	39 0 0
,, £374 12s. 0d. Conversion 3½ per cent. Stock P.O. Issue	... ...	400 0 0
		1,819 10 3
Balance, 31st December, 1948—		
At Bank and in hand	114 5 7	
Post Office Savings Bank...	515 14 0	
		629 19 7
		£2,449 9 10

INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31st DECEMBER, 1948

	£ s. d.	£ s. d.
Payments for year as per Receipts and Payments Accounts		1,819 10 3
Less: Creditors at 31st December, 1947	215 1 3	
Conversion Stock purchased	400 0 0	
Typewriter at cost	39 0 0	
Less: Amount written off...	19 0 0	
	20 0 0	
Payments in advance at 31st December, 1948	50 0 0	
		685 1 3
		1,134 9 0
Add: Creditors at 31st December, 1948		104 5 3
NOTE:—£100 has been included in respect of remuneration to a member of the Executive Committee.		
		£1,238 14 3

	£ s. d.	£ s. d.
Receipts for year as per Receipts and Payments Account		1,326 17 8
Less: Debtors and Subscriptions in arrear at 31st December, 1947	47 0 3	
Archaeological Survey of Palestine	60 6 7	
Subscriptions in Advance	18 7 6	
		125 14 4
		1,201 3 4
Add: Subscriptions in arrear at 31st December, 1948		36 9 9
		1,237 13 1
Balance, being excess of Expenditure over Income		1 1 2
		£1,238 14 3

NOTE: No depreciation for the year has been provided in Alterations and Improvements to No. 2 Hinde Street or on Museum, Library and Storeroom, Fixtures, Fittings and Furniture, etc.

AUDITORS' REPORT TO THE MEMBERS OF THE PALESTINE EXPLORATION FUND

We have examined the above Balance Sheet, Receipts and Payments Account and Income and Expenditure Account which are in agreement with the Fund's books of account and we have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of our audit. Proper books of account have been kept by the Fund, so far as appears from our examination thereof.

In our opinion and to the best of our information and according to the explanations given to us, the said Accounts give the information required by the Companies Act, 1948, in the manner required and present a true and fair view of the state of affairs as at 31st December, 1948 and of the excess of Expenditure over Income for the year.

19 COLEMAN STREET,
LONDON, E.C.2.
20th May, 1949

TURQUAND, YOUNGS, MCAULIFFE & CO.,
Chartered Accountants

LIST OF SUBSCRIPTIONS AND DONATIONS

RECEIVED BETWEEN 1ST JANUARY AND 31ST DECEMBER, 1948, INCLUSIVE

* Asterisks denote covenanted subscriptions

If any omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Annual Report.

	£	s.	d.
*Alford, Miss M. ...	1	18	2
*Arden-Close, Sir Charles	2	2	0
H.B. the Armenian Patriarch Jerusalem	2	2	0
Arnold, A. S., Esq. ...	3	3	0
Ashmole, Professor B.	1	1	0
Baer, Dr. Flora... ...	1	1	0
*Barham, S. P., Esq ...	1	1	0
*Barnett, Mrs. H. A. Lake	2	2	0
*Barnett, R. D., Esq. ...	1	1	0
Barron, Mrs. J.... ...	1	1	0
Bate, Miss D. M. ...	1	1	0
Bayley, A., Esq., the late	2	2	0
Bell, G. W., Esq. ...	1	1	0
*Bentwich, Professor N.	1	1	0
Birchall, Miss V. G. ...	1	1	0
*Birnbaum, Dr. S. A. ...	1	1	0
*Blair, Dr. D. P. ...	1	1	0
Blyth, Miss Estelle ...	1	1	0
*Boulton, W. H., Esq. ...	1	1	0
Bristow, E., Esq. ...	1	1	0
Brown, R., Esq. ...	1	1	0
*Buchanan, A. G., Esq....	1	1	0
*Bushell, W. F., Esq. ...	1	1	0
*Caiger, Rev. S. L. ...	1	1	0
*Carter, J., Esq. ...	4	4	0
Catterson, S. M., Esq....	2	2	0
Cawley, Rev. Dr. F. ...	2	2	0
Cerny, Rev. C. A. ...	1	1	0
Chalmers-Hunt, D. R., Esq.	2	2	0
Clark, A. P. S., Esq. ...	1	1	0
Clark, Miss C.		10	0
Clarke, Col. G. ,G. S. ...	1	1	0
Clementson, T. Esq. ...	1	1	0
Coeberg, Herr. H. ...	2	2	0
Coleman, Rev. Canon N. D....	1	1	0
Coullie, Lt.-Col. A. G.	1	1	0
Crawford, L., Esq. ...	1	1	0
Crawford, O. G. S., Esq.	1	1	0
*Crowfoot, J. W., Esq. ...	1	1	0
Curwen, E., Esq. ...	2	2	0
Curwen, Dr. E. C. ...	1	1	0
*Curwen, H. B., Esq. ...	1	18	2
*Daiches, Dr. S. ...	1	1	0
*Driver, Professor G. R.	2	2	0
Du Boulay, Brig.-Gen. N. W. H.	1	1	0
Dulau, Rev. P. ...	1	1	0
Earp, J. W., Esq. ...	1	1	0
*Edwards, Rev. A. H. ...	1	1	0
Evans, C. T., Esq. ...	1	1	0
Evans, E. M., Esq. ...	1	1	0
Dugmore, Rev. C. ...	1	1	0
Falconer, H., Esq. ...	1	1	0
Falk, Rabbi L.	2	2	0
Filby, F. A., Esq. ...	1	1	0
*FitzGerald, G. M., Esq.	2	2	0
Fleming, Col. A. ...	1	1	0
Foster, W. G., Esq ...	4	0	0
Fothergill, Dr. C. F. ...	1	1	0
*Frank, Miss H. C. ...	1	1	0
Fraser, C. J., Esq. ...	4	4	0
Freshfield, the Misses ...	1	1	0
Fry, Miss A.	1	1	0
Carried forward	£90	4	4

	£	s.	d.
Brought forward ...	90	4	4
Fuller, Rev. R. C. ...	1	1	0
Gailit, Miss L.	1	0	0
Gamble, Rev. H. J. ...	1	1	0
*Gardiner, Dr. A. H. ...	2	2	0
*Garner, Rev. H. ...	1	1	0
Garnett, Rev. Canon T. A.	2	2	0
*Garstang, Professor J. ...	2	2	0
Gaster, Professor T. ...	1	1	0
Gibson, Mrs.	1	1	0
*Glancy, L. M., Esq. ...	1	1	0
Goadby, Dr. F. M. ...	1	1	0
Guillaume, Professor A.	1	1	0
Gurney, Dr. O. R., ...	1	1	0
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Haddick, Rev. J. E. K.	2	2	0
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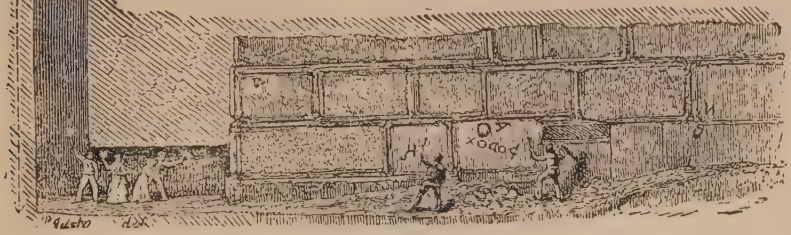

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NOTES AND NEWS

THE two focal points of interest which are attracting the attention of students of Near Eastern archæology at the present time are the Phœnician inscriptions at Karatepe, and the ancient biblical manuscripts discovered by Bedouins in a cave near the Dead Sea. Hitherto, so far as I am aware, British scholars have not had an opportunity of studying these manuscripts at first hand, but the results of preliminary studies have appeared in the October issue of BASOR, and in particular a list of variant readings in the Isaiah MS. by Professor Millar Burrows. An account of the discovery and its importance for biblical studies was given by Professor Wallenstein at the January meeting of the Society for Old Testament Study in London. It is too early yet to form any opinion of the extent to which the new manuscript of Isaiah supports or departs from the Massoretic text, but Professor Millar Burrows offers several interesting cases in which the new MS. confirms conjectural emendations. . The list is to be continued in the next issue of the BASOR.

The other point of interest, the Karatepe inscription, is being intensively studied both in this country and in the United States. Text, translation, and commentary have already appeared in the Journal of Near Eastern Studies for July, 1948 (Marcus and Gelb) ; in the Supplement to the July—Sept., 1948 number of the Journal of the American Oriental Society (Obermann) ; and in the Jewish Quarterly Review for July, 1948 (Gordon). Professor Honeyman of

St. Andrews gives us in the present issue of this journal a facsimile of the inscription, together with transcription, translation, and notes. Thus students may enjoy themselves by comparing the differences between the various versions presented to them by competent scholars.

It is pleasant to find the venerable *Revue Biblique*, after the vicissitudes of the war years, renewing its youth like the eagle. The issue for July, 1948, is full of good things. R.P.R. de Vaux continues his valuable study entitled *Les Patriarches hébreux et les découvertes modernes ;* R. P. L-H. Vincent raises again the problem of the date of the Emmaus basilica, and in another part of the journal continues his discussion of the O.T. conception of the ' high-place.' All these are marked by the sound scholarship, lucidity, and good sense, which we are accustomed to find in the pages of the Dominican periodical. In the first of the above-mentioned articles there is a particularly valuable discussion of the age-long problem of the historicity of Gen. XIV, in which abundant use is made of all the latest archæological discoveries, especially of the material from Mari. In the section of the article dealing with the ethnic origin of the patriarchs, the problem of the Habiru is reviewed again in the light of the continually increasing new material. The article is of first-rate importance to biblical students. In the article on the date of the Emmaus buildings, R.P. Vincent puts forward his reasons for assigning to them an earlier date than that proposed by Mr. Crowfoot in PEQ, 1935, and later in his *Early Churches in Palestine*, 1941. In his discussion of the O.T. conception of the *bamah*, or ' high-place,' R.P. Vincent refers to an early suggestion made by Professor Albright that a connection may exist between the structure of the altar of burnt-offering in the temples of Solomon and Ezekiel, and the Mesopotamian *ziqqurat*.

The problem of how the excavators of the Siloam Tunnel, beginning at opposite ends of the excavation were able to carry a devious line of tunnelling to a point of junction where the error in the levels was only 13 inches, has been examined

by Mr. Guy Underwood, the dowsing expert, in a pamphlet entitled *Archæology and Dowsing*. Mr. Underwood says, " the fact that the two ends of the tunnel were worked simultaneously seems to indicate that the engineers in charge must have been certain that, however much the course might wind about, one end of the excavation was bound to meet the other. The question therefore arises—how did they know it ? " Mr. Underwood's theory is that the engineers who were, according to him, presumably priests, surveyed the surface of the hill between the two points to be connected, and made a plan of the ' track lines,' which is the dowsers' technical term for the lines of influence which they claim to have discovered in connection with the sites of ancient monuments, such as Stonehenge, Avebury, etc. The engineers would presumably have " marked the courses of the track lines by cutting marks into the rock surface above the proposed tunnel as a permanent check to their measurements." Mr. Underwood hopes that at some future time it will be possible to test this theory by use of the divining rod ; he also suggests that a dowsing survey of the vicinity of the Siloam Tunnel might lead to the discovery of the Tombs of the Kings, which are supposed to be in the neighbourhood of Siloam. It would be interesting to hear from some of our field archæologists on this matter.

It is with regret that we learn from the editorial notice prefixed to Volume XXVIII of *Annals of Archæology and Anthropology* published by the University of Liverpool, that this valuable journal will henceforth cease to appear. This is the more to be regretted in that the number of such journals, of such a high standard of scholarship, published in this country, is all too small. The reasons alleged for the necessity of discontinuing publication are, increased cost of production, lack of financial support, and the changed international conditions which render archæological expeditions in the near future extremely unlikely. In addition to various valuable articles, among which special mention may be made of T. B. Brown's article on *1600–1400*

B.C. in the Eastern Mediterranean and O. R. Gurney's *Mita of Pahhuwa*, this final volume contains the index to Contributors, and index to Contents, for the whole 28 volumes. We bid farewell to this distinguished journal with a deep sense of gratitude for its contribution to the cause of scholarship for more than a quarter of a century.

In volume 29, fasc. 3, of *Biblica* there is published the text of a letter from the Pontifical Commission on Biblical Studies dealing with questions which had been submitted to it on the date of the Pentateuchal documents and the literary character of the first eleven chapters of Genesis. The attitude therein expressed towards the critical study of the Old Testament would cause surprise to most Protestant readers. That part of the letter which deals with the origin-stories of Genesis contains the following statement : " These literary forms (*i.e.* of Gen. I-XI) do not fall into any of our classical categories and cannot be judged in the light of Graeco-Latin or modern literary types. Hence we can neither deny nor affirm their historicity as a whole without illegitimately applying to them the standards of a literary type to which they do not belong. If it is agreed that in these chapters we do not find history in the classical and modern sense, we must also acknowledge that actual scientific data do not allow of a *positive* solution of all the problems which these chapters raise. The first duty incumbent upon scientific exegesis consists first of all in the careful study of all the literary, scientific, historical, cultural, and religious problems connected with these chapters ; next we must examine closely the literary forms of ancient oriental peoples, their psychology, their way of expressing themselves, and their actual idea of historical truth ; in short, we must bring together without prejudice all the material furnished by palæontology, history, epigraphy, and literary criticism. Only so may we hope to discern more clearly the true character of certain stories in the first chapters of Genesis." It would be hard to state more explicitly the attitude of the best modern Old Testament scholarship towards the problems of the early chapters of Genesis.

The following remarks of an eminent archæologist concerning dowsing and its relation to archæology may be of interest to the readers of this journal : " I am prepared to believe that a dowser can detect not only underground water but large cavities also, as I once tried one out at Atlit Castle on hidden vaults which he did not know of ; moreover I tried myself and experienced the same reaction. Therefore I can accept the assertion that dowsing might assist the digger to locate hidden tomb chambers : though, in the instance given, the search for the royal tombs on Ophel, I think there would be many rock-cut chambers to excavate which might prove to be of much later date, as we found in 1928 (see Mr. Crowfoot's *Ophel Again* PEQ, 1945). On a site like that, where systematic excavation is essential, I should hesitate to probe here and there as the author would probably advise. But in locating cemeteries around a site of settlement, his aid might be acceptable.

What interests me more is his contention that the ancients were guided by dowsing in excavating their deep wells and long rock-hewn conduits, works that were not to be undertaken lightly, *e.g.* Jacob's well near the site of Shechem is 100 ft. deep. The author's particular case is the Siloam tunnel. No less impressive are the *kanat* of Persia ; I have seen a recently restored example in the Jordan valley which leads the water of a strong underground spring several hundred yards underground to emerge into the plain to water crops. How did the ancients know where to dig ? "

RECENT WORK ON THE JERASH FORUM

By Lankester Harding

(*Note.* The view of Jerash on Plate I, for which we have to thank the Department of Antiquities in Palestine, shows what the " forum " looks like now that it has been completely cleared by Mr. Harding. As the picture shows, it lies in a depression between two hills : the wall on the left is part of the Second century temple of Zeus, the house on the right was the headquarters of the American Expedition, between them the main street of the city runs due north ; in its present form this street also dates mainly from the Second century.

In 1931 Dr. C. S. Fisher made some clearances on the site which are described in Kraeling's *Gerasa* pp. 153-158. His work included soundings at the north end of the west colonnade and near the south end of the east colonnade, and he discovered that the foundations descended 6 m. in the one place and 8 m. in the other, until they reached a stratum of " hard reddish gravel " ; everything above this stratum was " a secondary deposit of earth." It appears, therefore that the forum rests largely, at least, on an artificial filling.

Dr. Fisher's work was not sufficiently extensive to tell us much more about the early history of the building. The potsherds and coins which he mentions suggest that it was laid out in the First century of our era to lead from an older gate on the site of the present south gate to an older and narrower street on the same line as the later street with Corinthian colonnades, a section of this older street still surviving at the north end of the town bordered by Ionic columns like those in the " forum "

There is no evidence at present that it was meant to be a forum in the usual sense of the term The curious pear-shaped plan was dictated by the lie of the ground.

J. W. C.)

THE clearance of the Forum was part of the programme of clearance and conservation undertaken at Jerash by the Transjordan Government during the years 1937-40. The area around the South Tetrapylon was cleared at the same time, and a start made on the stretch of the cardo connecting the Tetrapylon with the Forum. Unfortunately the war intervened before this could be completed, and a short length still remains to be done. The work in the Forum has, however, contributed nothing towards answering the questions propounded by Fisher in *Gerasa*[1]. Only one fragmentary inscription was found here apparently from the triple (?) gateway leading to the cardo.

General The entire area was filled with what appeared to be wash from the " Camp Hill " and other parts of the city. In the south east corner this attained a depth of a metre and a half, while being less than half a metre deep at the North end. Most of the decorated sherds referred to (Pl. III, 1) were found in the eastern areas, but a few pieces were found in other parts. With the exception of some architraves and column drums, there were singularly few large stones in the filling. None of the architraves or drums were on the surface, from which it would appear that no serious damage has been done since an earthquake (?) in the sixth or seventh century. The whole pavement is preserved except for a small strip at the southern end : it slopes very steeply from north to south, and the slope has the effect of making the bases of the most southerly columns of the eastern colonnade rather more than a metre above the pavement level, and also involved putting steps between each pair of columns. The pedestals on which the bases stand are at present only soft limestone, but may originally have been faced with stucco, which was much used in the period to which the colonnade belongs. In front of each of the columns of this eastern colonnade one paving stone is missing, but no explanation of this strange feature can be given : the hole is not exactly in the centre of any column. It does not occur on the western colonnade. A broad

[1] *Gerasa, city of the Decapolis*, p. 153.

outer ring of large paving blocks is of fine hard "Mizzi" limestone, but the central section is of soft limestone, very much smaller blocks, and it is a strip of this that is missing. Approximately in the centre of the Forum the blocks, from following the outline of the colonnades, are suddenly laid in a square of approximately 9.5 metres,and slightly stepped at the southern end to make a level plane : in the centre is the moulded footing of a pedestal of hard pink limestone. Two plain blocks of exactly the right width and one block with a cap moulding give the probable height of the pedestal : the proportions seem correct. It could not well have supported anything larger—or smaller—than a statue ; perhaps that illustrated on Pl. XXXI of *Gerasa* may have some connection.

Built into a late wall on the spot were 9 stone chairs, one with one arm rest : they do not seem to be the theatre type of chair, but it is difficult to see what connection they can have with the Forum.

At the south end the curved line of the paving blocks ceases abruptly, and is replaced by a straight line of blocks running across the full width of the Forum at that point, between the southern horns of the colonnades. The line is exactly parallel to the line of the Temenos wall and staircase of the Zeus temple, and was undoubtedly laid down to fit into this feature. How this was achieved cannot be established without further excavation, though it is doubtful if even that could bring much to light, as the area seems to have been given over to destruction and the building of Byzantine-Arab houses : this is very clearly seen in the small area which has been cleared. It was not possible to follow the eastern colonnade to its very end, nor to clear the road connecting the Forum with South Gate, but this is an operation which should certainly be undertaken some time. No new features were brought to light at the north end, and this area has already been fully described by Fisher in *Gerasa*. The area of the triple gate has not been cleared, but a superficial examination of the pavement lying between the outer piers showed no traces of central piers.

The great drain which runs down the centre of the cardo is continued across the Forum towards the south-west corner, as indicated by manhole covers let into the pavement : it is not clear where it goes after this.

Later use of the area. With the decay of the city's prosperity the Forum became built over, and its normal functions ceased. This occurred later than the early seventh century, as is suggested by a small cache of coins found on the floor of the Forum beneath room A, the earliest of which is of Anastasius, and the latest of Maurice Tiberius 582-602 A.D. The building of which this room forms a part is in general layout and construction of slightly better quality than any of the other intrusive walls, though the walling between the columns may well belong to this period, but it would appear that the Forum was in ruins before this, for fallen architraves from the colonnades are incorporated in the walls of this building.

Around the square central portion of the pavement was constructed a tank or cistern for water. This was conducted to the site in pipes of greyish black pottery, laid in two channels cut in the paving stones, one coming from the north and one from the west. At the point where they entered the tank was a T joint : surplus water apparently flowed into a sump made by removing a paving stone and digging a pit, though the west pipe forked and one section flowed direct to the sump. The tank itself shows evidence of two periods of construction, the addition on the north being rougher work than the original. This was well plastered, and a plaster projection and recessing of the wall at the point where the water must have entered suggests there may even have been a fountain. It was in these walls that the stone chairs already referred to were incorporated. There were traces of some kind of construction adjoining the west wall of the tank, but it is impossible to guess what this was.

Two long converging walls running north and south across the Forum are a puzzle. Their purpose is, to say

the least of it, obscure, unless the " enclosure for animals " be suggested. The building is extremely bad, and they must be, perhaps, the very latest period of occupation of this area, before it was silted up. The lowest courses actually rest on the paving blocks.

All intrustive walls rest on the paving blocks, with no deposit under them. The pottery associated with the coins is of the usual Byzantine type, whereas the black ware of the water pipes should be somewhat later.

Apart from a very few and very small fragments of glaze, the sherds from the filling are curiously consistent, and are chiefly comb-incised grey ware, and fragments of flat bowls of fine red ware, decorated in red and white. The decorations include a great variety of motifs, human, animal and floral, and some have short inscriptions in Greek. There is at present no satisfactory evidence for dating this material, but on general stylistic grounds the treatment of the figures and even the floral motifs is strongly reminiscent of the frescoes of Qasr Amra,[1] and indeed an 8th century A.D. date would seem to fit in well with the suggested sequence.

[1](A fragment of the same ware was found, oddly, in the cache of late classical lamps from Jerash published by Mr. Iliffe in the Quarterly of the Department of Antiquities, XI, 1-26. The fragment in question is shown on Plate ix, no. 162, and is described on p. 25—" Reddish-brown ware, hard and well baked. The dish or plate was of curved form, with a ring base in the Roman sigillata tradition. On the interior was painted a lion or tiger, in white paint within brown outlines ; the body and forelegs are preserved. This piece belongs to a class of Byzantine or early Arab pottery of which a considerable amount has been found elsewhere at Jerash, e.g. in the Forum. It was apparently in use during the last period of the existence of Jerash as a city, before it was abandoned." One of the pieces which is not shown on our illustration represents a man wearing trousers like the figure of the caliph found by M. Schlumberger at Qasr el Heir el Gharbi. I cannot recall having found any similar ware in rooms of squatters in the churches at Jerash nor does any appear to have been found at Khirbet el Mefjer unless it is identical with Baramki's Ware 10 (Q.D.A.P.,X., p. 68). It may therefore have had a short life, probably, as both Mr. Iliffe and Mr. Harding suggest, in the eighth century. J. W. C.)

This would, then, be as follows :—

End of the Forum as such, late sixth century.

Construction of tank and laying of water pipes, late seventh century.

Final silting up of the area, mid-late eighth century.

It will be seen from the proportional list of coins that these agree very well with this proposed final date, there being only six coins of a date later than Umayyad.)

The Coins. The following particulars are compiled from reports by Sir Alec Kirkbride, who examined all the coins found in the excavation.

Proportional summary :—

Seleucid, certain 12, probable 4 .. Total ..	16
Nabataean, all Aretas IV	3
Roman Colonial	30
Roman Imperial (mostly later than Diocletian) ..	212
Byzantine	65
Byzantine—Arab transition	11
Umayyad	113
Ayyubid	3
Bahri Mamlukes	1
Burgi Mamlukes	1
European bronze ? Hungary	1
	466

The following rulers and mints are represented :—

Seleucid. Demetrius II and III. Mint, Tyre. Also Alexander types.

Roman Colonial	Philip II	Antioch
	Faustina I	Bostra
	Severus Alexander	Caesarea
	Crispina	Jerash
	Elagabalus	Neapolis
	Commodus	
Roman Imperial	Gordianus Pius	Antioch
	Probus	Caesarea
	Constantine I	Rome
	Crispus	Thessalonica
	Constantine II	
	Helena	
	Arcadius	
	Theodosius II	
Byzantine	Anastasius	Antioch
	Justin I	Alexandria
	Justin II	Constantinople
	Maurice Tiberius	Nicomedia
		Cyzicus

Umayyad The mints of Falestin, El Ordon, Tabaria, Dimishq and Amman are represented.

The Byzantine cache comprises the following :—

Anastasius	Constantinople	1
Justin I	Constantinople	1
Justin I	Uncertain	1
Justinian I	Antioch	2
	Nicomedia	1
Justin II	Nicomedia	2
	Constantinople	1
	Antioch	2
Maurice Tiberius	Antioch	1
Uncertain, either Anastasius, Justinian or Justin II		1

Other objects. The usual miscellaneous collection of bronze spatulae, kohl sticks, rings, bells, etc., came to light, but as they are of no assistance in dating it has not been deemed necessary to offer plates of these here. Two gold objects were found, an Ayyubid coin and an earring : the latter is second or third century work, and its presence in the Forum filling can best be explained as part of a tomb robbing lost by the robber. The three fragmentary pottery masks (Pl. III, 2) seem to be contemporary with the decorated pottery, as the central one is decorated in red on white.

The South Tetrapylon. Clearance of the circular plaza has added nothing to our knowledge of this monument. The area was encumbered with Arab walls, and the buildings of which they formed a part must have been the veriest hovels, the same remark applies to the houses in the cardo. The rooms in the north west and south east quadrants which had been cleared to a considerable depth below floor

level[1] were filled up again, as owing to damp and exposure the foundations were becoming unsafe.

The only thing of interest found is a fragmentary inscription from a fountain on the west side of the cardo about half way between the Forum and the Tetrapylon : the inscription was removed to the Museum before it was realised that it was in situ. The fragment of the inscription which remains records the gift of the fountain (?) to his fatherland by Marcus Aurelius Philippus Straton (?) in the time of Julia Domna (Pl. II, 2). Considerable alteration to the side walk was apparently being made at this time. As the remainder of the cardo to the Forum is not yet cleared, there seems no point in going into further detail at present.

The south east podium of the Tetrapylon was finally dismantled and rebuilt, being reconstructed as far as the column bases on the lines suggested in *Gerasa*[2]. The stones of the Podium were gradually being forced apart by the roots of weeds, and even the lowest course resting on the pavement, with the weight of the other courses above, had been pushed 3 cms. out of its original line, which was clearly marked on the paving blocks.

[1] *Gerasa*, p. 108 ff.

[2] *Gerasa*, plan XVI

JERASH, FORUM AND STREET OF COLUMNS. LOOKING N.

FIG. 1

THE FORUM, LOOKING WSW INTO WEST WALL OF JERASH

FIG. 2

INSCRIPTION FROM THE STREET

FIG. 1. THE PAINTED POTSHERDS

FIG. 2. THE MASKS

EPIGRAPHIC DISCOVERIES AT KARATEPE

By A. M. Honeyman

Until 1945 the district of Karatepe on the Jeyhan (Pyramus) River in Eastern Cilicia was virtually unknown to archaeologists. E. J. Davis in 1875, J. T. Bent in 1890, Heberdey and Wilhelm in 1892, and Gertrude Lowthian Bell in 1905, visited Kadirli (Kars) some ten miles west-north-west on the Savrun River, but recorded nothing of the Karatepe antiquities. Woolley, during the 1914–18 war, and the French occupation troops in 1918-21, knew of statues standing on the eminences Ayricatepesi and Domuztepe situated on the right and left banks respectively of the heavily wooded gorge of the Jeyhan just above Karatepe, which is roughly equidistant from Sis, Zenjirli and the Gulf of Alexandretta.

When Professor H. Th. Bossert and Dr. Bahadir Alkim of the University of Istanbul, in the course of their investigation of neo-Hittite routes over the Taurus Mountains towards Syria, visited the district in 1945 and again in 1946, they found that the chief of the statues, now prostrate, was that of a kingly figure, the base of which was covered, as were one side of a near-by lion and minor fragments, with Semitic alphabetic writing. A more fully-equipped expedition in the spring of 1947 secured squeezes and photographs of the inscriptions, cleared the adjacent surface and established that the statues formed part of a monumental gateway on the south-west side of the citadel on the northmost of the three peaks of the Karatepe hill. The gateway was flanked by a row of orthostats on which were carved birds, animals, hunters and worshippers, in the Syro-Hittite style of workmanship, and a large fragment of a Hittite hieroglyphic inscription was unearthed. Closer study of the

Semitic inscription[1] showed it to be an autobiographical record in good Phoenician, set up in the latter half of the eighth century B.C. by one 'ZTWD, ruler of the Danunians, in the town that he had named after himself.

The campaign undertaken by the same archaeologists in the autumn of 1947 yielded still more startling results. Excavations were undertaken on the previous site and also at a lower site to the north-west of the area, where protruding orthostats gave promise of further carvings. The inscribed statue was found to be occupying a small hall or court opening off a double-winged room beside the entrance passage. The lower site was found to form an entrance similar in design to that at the upper site. A ramp leads up past two towers ; making a right-angled turn to the left, the entrant passes between two portal-lions to a passage $7\frac{1}{2}$ metres long, then through a gateway between two sphinxes and on to a double-winged door. The passage-walls are adorned with reliefs showing various scenes of

[1] The literature on the documents from Karatepe is already quite extensive, and the writer is sorry if he has overlooked any contribution that has appeared at the time of writing (29 xii, '48). The excavators have published their results in Turkish and English in *Publications of the Institute for Research in Ancient Oriental Civilisations, No. 1—Karatepe, First Preliminary Report* (1946), and *No. 3—Second Preliminary Report* (1947), supplemented by bilingual announcements in *Belleten* XII (1948), 241-255 and 515-531 with Plates cxi-cxii ; in the latter article Bossert gives a first account of his decipherment of the hieroglyphic text. The Phoenician inscriptions from this first site have been published by—
J. Friedrich in *Forschungen und Fortschritte* XXIV 7 8 (April 1948), 76-79 ;
R. D. Barnett, J. Leveen and C. Moss in *Iraq* X (July 1948), 56-71 ;
A. M. Honeyman in *Le Muséon* LXI (July 1948), 43-57 ;
C. H. Gordon in *Jewish Quarterly Review* XXXIX (July 1948), 41-50 ;
J. Obermann in *Supplement No.* 9 (July-September 1948) to *Journal of the American Oriental Society* LXVIII No. 3 ;
R. Marcus and I. J. Gelb in *Journal of Near Eastern Studies* VII (July 1948), 194-8 (columns II and III only).
Other treatments of this text are understood to be in course of publication by H. L. Ginsberg, A Dupont-Sommer and Widengren and Ringgren. The historical implications have been separately treated by J. Garstang in *The Times* 24 IV 48, p. 5 and A. Alt in *Forschungen und Fortschritte* XXIV 11–12 (June 1948), 121-4.

combat, animals rampant, dancers and musicians, all in the late or neo-Hittite manner, and with a series of inscriptions. The inscriptions on the left as one enters are in hieroglyphic Hittite, and those on the right and on a fragment of a portal-lion in Phoenician of a form contemporary with that of the upper inscription. The Phoenician text, in three broad columns of 21, 19 and 18 lines respectively, covers four orthostats and appears to extend along the flat top of the bases of the next orthostats.[1] The text is complete, except for four letters, which can readily be supplied, on the upright, and a few more on the horizontal portion. It is thus by far the longest and best-preserved Phoenician inscription ever recovered. The text differs but slightly from that of the statue inscription at the upper site. And Professor Bossert affirms confidently that the hieroglyphic Hittite agrees so closely with the Semitic inscription in length, in order and spacing of proper names, and—so far as can be judged—in contents, that the two must be regarded as forming more or less exact[2] bilingual copies of the same declaration. Thus for the history of the *vilāyet* of Adana at the period in question, for Semitic epigraphy and for the decipherment of the hieroglyphic Hittite, with all the corollaries that may derive therefrom, the Phoenician inscription is of unique importance.

Text and translation of the lower inscription and of the adjacent lion fragment[3] follow.

1.	I אנך אזתוד הברך בעל עבד	
2.	בעל אש אדר אורך מלך דנ ים	
3.	פעלן בעל לדננים לאב ולאם יחו אנך איתי	
4.	דנים ירחב אנך ארץ עמק אדן למצא ש	
5.	מש ועד מבאי ובן בימתי כל נעם לדנני	

[1] See p. 39, reproducing a facsimile of the text kindly sent by the excavators. The writer is indebted to them for permission to reproduce the facsimile and for off-prints and information in connection with their work.

[2] Cf. *Belleten* XII (1948), 529.

[3] Hereafter referred to as B and Leo B respectively. The headings in italics introduced into the translation of B are editorial.

I—*cont.*

6. ם ושבע ומנעם ומלא אנך עקרת פער ופע
7. ל אנך סס על סס ומגן על מגן ומחנת על
8. מחנת בעבר בעל ואלם ושברת מלצם
9. ותרק אנך כל הרע אש כן בארץ ויטנא אנך
10. בת אדני בנעם ופעל אנך לשרש אדני נעם
11. וישב אנך על כסא אבי ושת אנך שלם את
12. כל מלך ואף באבת פעלן כל מלך בצדקי ו
13. בחכמתי ובנעם לבי ובן אנך חמית ע
14. זת בכל קצית על גבלם במקמם באש כן
15. אשם רעם בעל אנדדם אש בל אש עבד
16. כן לבת מפש ואנך אזתוד שתנם תחת פעמ
17. י ובן אנך חמית במקמם המת לשבתנם דנג
18. ים בנחת לבנם ועז אנך ארצת עזת במבא
19. שמש אש בל עז כל המלכם אש כן לפני וא
20. נך אזתוד ענתנם ירדם אנך ישבם אנך
21. בקצת גבלי במצא שמש ודננים

II 1. ישבת שם וכן בימתי בכל
2. גבל עמק אדן לממצא שמש
3. ועד מבאי ובמקמם אש כן
4. לפנם נשתעם אש ישתע אדם ללכת
5. דרך ובימתי אן כ אשת תך לחד
6. י דל פלכם בעבר בעל ואלם
7. וכן בכל ימתי שבע ומנעם ושבת
8. נעמת ונחת לב לדונים ולכל עמ
9. ק אדן ובן אנך הקרת ז ושת
10. אנך שם אזתודי כבעל ורשף
11. צפרם שלחן לבנת ובני אנך ב
12. עבר בעל ובעבר רשף צפרם ב
13. שבע ובמנעם ושבת נעמת ובנחת

II—*cont.*

14. לב לכני משמר לעמק אדן ולב
15. ת מפש כבימתי כן לארץ עמק א
16. דן שבע ומנעם ובל כן מתמל דנני
17. ם ללב ימתי ובן אנך הקרת ז שת
18. אנך שם אזתודי ישב אנך בן
19. בעל כרנתריש וילך זבח לכל

III 1. המסכת זבח ימם אלף ובנעת חזרש
2. ש ובעת קצר ש וברך בעל כרנ[ן
3. תריש אית אזתור חים ושלם
4. ועז אדר על כל מלך לתתי בעל כרנתריש
5. וכל אלן קרת לאזתוד ארך ימם ורב
6. שנת ורשאת נעמת ועז אדר על כל מל
7. ך וכן הקרת ז בעלת שבע ותרש ועם
8. ז אש ישב בן יכן בעל אלפם ובע
9. ל צאן ובעל שבע ותרש וברבם ילד
10. וברבם יאדר וברבם יעבד לאז
11. תוד ולבת מפש בעבר בעל ואלם
12. ואם מלך במלכם ורזן ברזנם אם א
13. דם אש אדם שם אש ימח שם אזתו
14. ד בשער ז ושת שם אם אף יחמד אי
15. ת הקרת ז ויסע השער ז אש פעל א
16. זתוד ויפעל לשער זר ושת שם עלי
17. אם בחמדת יסע אם בשנאת וברע יסע
18. השער ז ומח בעל שמם ואל קן ארץ

IV = *margo.* ושמם עלם ו[ל]זבל דר בן אלם אית הממלכת הא
ואית המלך הא ואית [ה]אדם הא (אש אדם שם)

B 1. *Leo* [ה]אדם הא אש אדם שם אפס
2. שם אזתוד יכן לעלם במשם
3. שמש וירח

The identity of the author of the inscription.

I[1] I am 'ZTWD, that do bless Baal, the servant[2] of Baal, whom 'WRK, king of the Danunians, ennobled.[1]

The achievements of 'ZTWD.

[3]Baal made me a father and a mother to the Danunians. I preserved the[4] Danunians ; I extended the country of the plain of Adana from the rising of the[5] sun even unto its setting. And in my days the Danunians had all concord and[6] sufficiency and prosperity. I filled the bases (?) of Paḫri, adding[7] horse unto horse and shield unto shield and camp unto[8] camp, by the favour of Baal and the (other) gods. I shattered the traitors[9] and I crushed all the evil that there was in the land. I erected[10] the temple of my lord in prosperity, and I created prosperity for the stock of my lord.[11] And I sat upon my father's throne, and I instituted peace with[12] every king ; yea, and with conciliation did every king treat me for my right and[13] my wisdom and my goodly intent. I built strong ram-[14]parts in all the extremities upon the frontiers, in (various) places in which there were[15] ill-disposed men, raiding gangsters, not one man of whom was subject[16] to the house of Mopsus ; I, 'ZTWD, set them beneath my feet.[17] I built ramparts in those places for the Danunians to inhabit[18] them in the peace of their hearts. And I subdued mighty lands in the setting[19] of the sun which none of the kings that were before me had subdued ;[20] I, 'ZTWD, subdued them, I reduced them (and) I settled them[21] in the extremity of my territory in the eastward, and Danunians II[1] I settled there, so that in my days they occupied[2] all the frontiers of the plain of Adana from the rising of the sun[3] unto its going down, even places which formerly[4] were fearful, in which men feared to go[5] their ways ; but in my days it has not been so, for I maintain order[6] to delight the poor of the provinces by the aid of Baal and the (other) gods.[7] And there has been in all my days sufficiency and prosperity and peaceful[8] abiding and rest of mind for the Danunians and for all the plain[9] of Adana.

[1] Or ' the exalted man, the 'WRK, the king of the Danunians.'

His building of the eponymous city.

And I did build this city and appoint [10] 'ZTWDY as its name, according as Baal and Rashap [11] of the he-goats impelled me to build. I did build it for [12] the sake of Baal and for the sake of Rashap of the he-goats in [13] sufficiency and prosperity and goodly abiding and peace of [14] mind, that it might be a fortress for the plain of Adana and the house [15] of Mopsus, for in my days the land of the plain of Adana [16] has had sufficiency and prosperity, and none has set himself against [17] the Danunians in my days.

His introduction of the cult of Baal KRNTRYS.

I did build this city, and I did appoint the [18] name 'ZTWDY, and I did establish in it [19] Baal KRNTRYS. And they shall bring a sacrifice to sustain III [1] this image,—a daily sacrifice of an ox, but in the season of ploughing [2] or of harvest a sheep or a goat. And Baal KRN-[3] TRYS blessed 'ZTWD with life and prosperity [4] and noble strength above every king, through Baal KRNTRYS [5] and all the deities of the city giving to 'ZTWD length of days and multitude [6] of years and agreeable dominion and noble strength beyond every king.[7] And this city has been endued with sufficiency and wealth ; and this [8] people that dwells therein will be endued with oxen and with [9] sheep and with sufficiency and wealth. And of their abundance they will bring forth,[10] and of their abundance they will wax mighty, and of their abundance they will serve 'ZT-[11] WD and the house of Mopsus under the auspices of Baal and the (other) gods.

Execration of enemies and defacers of the inscription.

[12] And if there be any king or any potentate or if there be any[13] man that is a man of renown that would efface the name of 'ZTW-[14] D upon this gateway and would set up (another) name, yea, if he should covet [15] this city and would remove this gateway which 'ZTWD [16] has made and make it into some strange gateway and set (another) name upon

it [17] or if in cupidity he would remove or in enmity and malice would remove [18] this gateway, then will the Baal of heaven and the (other) gods that hold earth IV and heaven (?) efface among the gods for ever and unto all generations that monarchy and that king and that man (of renown ?).

Leo B. [1]The name of that man that is a man of renown will cease to be,[2] and the name of 'ZTWD will be for ever as the name [3] of the sun and the moon.

We may now reconstruct the text of the fragmentary columns I and IV of the upper or A inscription.[1]

1.	I	אנך אזתוד הברך בעל
2.		עבד בעל אש אדר אורך
3.		מלך דנים פעלן ובע
4.		ל לדנים לאב ולאם
5.		יחו אנך אית ודנים
6.		ירחב אנך וארץ עמק
7.		אדן לממצא ושמש ועד
8.		מבאי וכן ובימתי כל נ
9.		עם לדנים ושבע ומנ
10.		עם ומלא אנך עקרת פע
11.		ר ופעל ואנך סס על סס ומג
12.		ן על מגן ומחנת עלמ
13.		חנת בעבר בעל ובעבר
14.		אלם ושברת מלצם ותרק
15.		[ואנך כל הרע אש כן בארץ]

[1] The published text of columns II and III, with the gaps filled from readings of B kindly supplied by Professor Bossert, agrees so closely with the text of B I 13-II 18 and III 2-6 that it need not be repeated here ; deviations are noted in their place in the notes. For the same reason we omit the text of Leo A, which repeats in fragmentary fashion the text of A II 12-III 10 = B I 20-II 11. The letters marked with a dot as uncertain include some which involve a rejection of Bossert's reading ; so also in B I 17, II 12 and IV init. Where Bossert's reading must be retained, there may be further differences of text and interpretation as between A and B.

I—*cont.*

16. ויטנא אנך בת אדני בנעם
17. [ופעל אנך לשרש אדני נעם
18. וישב אנך על כסא אבי
19. ושת אנך שלם את כל מלך ו
20. אף באבות פעלן כל מלך בצ
21. דקי [ובחכמתי ובנעם לב

IV 1. ועז אדר ע[ל כ]ל מזלך
2. [ו]זבח אש ינלך ל[אלם
3. כל המסכת ז
4. ז זבח ינמם אלף וז[ב
5. עת חרש [ש ובעת קצ]ר
6. ש וכן [הקרת ז בעלת
7. שבע [ותרש ועם ז אש
8. ישב בן יכן בעל אלפם ו
9. בעל [צאן] ובעל שבע ותרש
10. וברכם ילד[וברכ]ם [יאדר
11. וברכם יעבד לאזתוד [וכל
12. בת [מפש] בעבר בעל ובעבר אל
13. ואם מל[ך במלכם ורזן ברזנם
14. מכל אדם אש אדם שם אש יא
15. מר אנחת שם אזתוד המלך
16. ל[אפס ושת שם אם אף יחמד
17. איתת הקרת ז ויאמר אפעל
18. י[לזר ושת שמי עלי וז י
19. בטל[האלם אש על אזתודני
20. בעל כרנתריש אש בבת[ז תב
21. [ח · · אמ אש[ ]א[ ]ל ·

Since I have dealt elsewhere with the A inscriptions, I confine myself in these notes to amplifications and corrections of that treatment and to the new material of the B text. Cross-references are added to facilitate comparison.

I 1. אזתוד (A I 1).—On the basis of the hieroglyphic text, in which the name occurs in five different spellings, Bossert vocalises the word as *Azītawa(n)das*. This would dispose of the comparisons adduced by the writer for the first part of the name.

I 1. הברך בעל (A I 1.)—I differ from other editors of A in regarding the participle as active—"blessing, worshipping, revering." My reasons for adhering to this view are these—(*a*) it seems more probable that the author should introduce himself as a dutiful devotee than as a favoured beneficiary on an epigraph that is not a votive offering but a record of piety; (*b*) the alleged Biblical parallels[1] are imperfect and of doubtful relevance; (*c*) since the article is rare in Phoenician and occurs in this inscription only four times apart from the demonstrative and twelve or fourteen times in all, it is quite improbable that it is used pleonastically here; it must serve to indicate that the phrase is not a construct nexus but an appositional participle with the accusative; (*d*) Bossert (*Belleten* XII (1948), 529) renders the hieroglyphic version of the opening declaration as "Ich fürwahr (?) bin Asītawa(n)das, Meiner Sonne Mann, des Wettergottes Diener."

I 2 דרוא (A I 2).—This word remains somewhat obscure. and may be a Hittite royal or other honorific title, However, if Bossert's explanation of the parallel hieroglyphic expression is to be followed, we must re-interpret the Phoenician in the light of the other version, and render "whom Awarikus, King of the Danunians, exalted"; the verb אדר occurs in another connection in III 10. אורך is then a transliteration from the hieroglyphic and may stand

[1] Dealt with, e.g. by Gesenius-Kautzsch-Cowley: *Hebrew Grammar* (1910), § 127 f-i.

for Urik(ki) or Uriak, king of Quë in the third year of Tiglath-Pileser III and later.[1] On the basis of a similar expression in a hieroglyphic Hittite text from Carchemish, Bossert suggests that Awarikus and Azītawandas are father and son ; the exaltation of Azītawandas is then presumably his elevation to the position of crown-prince or heir-designate ; cf. inf. line 11. On this interpretation it is remarkable that 'ZTWD is nowhere explicitly called " King of the Danunians."

I 3. ולאם.—Tentatively conjectured by Obermann in A I 4 ; cf. Kilamuwa, line 10.

יחו (A I 5).—As shown in *Le Muséon* LXI (1948), 49-50 and nn., and noted also by Gordon, this and similar forms, including some with pronominal suffixes, are infinitives used absolutely. The usage is by no means a barbarism, being employed throughout Canaanite from Tell el-Amarna and Ugaritic to Job and Ecclesiastes, but nowhere else is it used with such frequency, and this over-working of a legitimate form of expression may be due to " translation Phoenician."

I 6. ע·רת פער (A I 10-11).—Bossert (*loc. cit.*) translates the hieroglyphic version as " Und ich füllte die paḥ(a)raischen Depots (Paläste ?)." Paḥri figures as the capital of Quë in an inscription of Shalmaneser III, roughly a century before this text. עקרת must then be connected with עקר " stock, member " ; otherwise the sentence might be read as " I sated the barren ones in respect of desire, fulfilled their longing."

I 7-8. מחנת . . . סס על סס (A I 11-13).—For the idiom cf. Isaiah v 8, xxx 1, Jeremiah iv 20, Job xvi 14. מחנת —" camp " as in Ahiram, etc.

I 8. מלצם (A I 14).—" Traducers, delaters, traitors " as in Psalm cxix 51 (of foreign enemies ?), Proverbs xx 1 (LXX ἀκόλαστον), Job xvi 20 ; and for their violent punishment cf. Proverbs xix 25, 29, xxi 11.

[1] Luckenbill : *Ancient Records of Assyria and Babylonia* I (1926), 273 (no. 769), 287 (no. 801).

I 9. ותרק (A I 14).—The word is new to Canaanite ; the context shows it to be an infinitive in form, and it must be regarded as an unassimilated form[1] of the word טרק, which is known from later Hebrew, Aramaic and Arabic ; translate " pound, beat, crush."

I 10-11 (A I 18).—Irrespective of the interpretation accorded to line 2, this statement disposes of any suggestion that 'ZTWD was a usurper or not of royal lineage.

I 12. באבת (A I 20).—From אבי " be willing "[2] and hence " goodwill, conciliation."
בצרקי—" Rightfulness " rather than " righteousness " is the sense ; the word refers to the legitimacy of 'ZTWD's kingship.[3] He earned the respect of his neighbours through (*a*) his right to the throne, (*b*) the ability he displayed in his home rule, and (*c*) his peaceable foreign policy.

II 5-6. אנך . . . דל פלכם (A III 3-4).—The difficulty of this passage is reflected in the variety of translations offered by commentators on the statue text—"lege ich mitten auf das Brett Genüge des Faserstoffes der Spindeln " (Friedrich) ; " konnte selbst eine Frau (dort gehen) " (Alt, leaving the remainder of the phrase unresolved) ; " a woman could *stroll without molesters* " (Gordon) ; " I gave (?) confidence (?) for the rejoicing (?) of the poor (?) of the districts " (Marcus and Gelb) ; " I turned oppression to joy (in all ?) the regions " (Leveen and Moss) ; " I do put restraint to strife upon the highways " (Obermann) ; " I impose submission so as to delight the poor of the provinces " (Honeyman). With one modification I adhere to this interpretation. The

[1] Cf. Brockelmann : *Grundriss der Vergleichenden Grammatik der Semitischen Sprachen* I (1908), 169 (§ 58 d β) ; cf. 161 (§ 58 b ξ).

[2] On the semantic developments of this root cf. the writer's remarks in *Journal of the American Oriental Society* LXIV (1944), 81-2.

[3] Cf. Gaster in *Journal of Near Eastern Studies* VII (1948), 192 and Honeyman in *Journal of Egyptian Archaeology* XXVI (1940), 63.

word אנך appears to be redundant, there being no occasion to emphasise either the preceding suffix[1] or the following verb ; it should be divided to read אן כ, i.e. אֵין כִּי " there is not (any such fear), for. . ." The imperfect אשת is then quite apposite, as describing a continuous feature of 'ZTWD's reign. The word אן is new to Phoenician; besides the Hebrew, cf. Moabite א and Ugaritic *in*. For the word לחדי see now Gordon : *Ugaritic Handbook* (1948), no. 727, and for the form *ibid.* § 9.48 (p. 79). II 9-10. ושת אנד שם.—A III 8 reads ושם.

II 15-16. Lege cum A III 13-14 ובל בן מתמלל ב מתי לדנים. The reading affords an insight into the mentality of the stone-carver. In the execution of his task his weary eye passed from the first *lamed* of מתמלל to that before דנים, but he noticed the omission in time to insert the missing letters in the next line. That he should have left the *vox nihili* מתמל does not argue unfamiliarity with Phoenician ; he knew at least enough to recognise his error and to make words of a sort with the missing letters. But he had had to rectify an omission only three lines previously ; one letter could be inserted, but to squeeze in a whole phrase would be to invite attention to his stupidity or carelessness ; a change in the word-order would not suffice, and so he shrewdly weighed the chances of a neat mistake remaining unnoticed against the consequences of an obvious botchery.

II 17-18. ישב . . . שת.—A III 15 has וישב . . . ושת.

II 18. ב " in it " (fem.) ; so also in III 8. Hitherto this form was known only in the masculine.[2] In place of בן A

[1] This is the explanation adopted by those who take אשת as " woman." The alleged contrast between אשת and אדם of the preceding line is somewhat artificial, for " man " as opposed to " woman " is איש in Phoenician. It should also be noted that the agreement in reading of A and B militates against the supposition that תד is an error for תלך or תכל.

[2] Hoffmann : *Über einige Phönikische Inschriften* (*Abh. Ges. Wiss. Göttingen* 1889, no. 6), 41 ; Ginsberg *in Journal of Biblical Literature* LVI (1937), 140.

III 16 has זהאלם. The variation recurs twice in the next sentence and will be seen to be of special significance.

II 18-III 1. ויל̇ך זבח לכל המסכת. The text of A IV 2-4 is quite different, and can now be more adequately explained. Through homœoteleuton the phrase לכ̇ל המסכת ז was omitted after לאלם ז; it was then inserted, without the initial letter, in the vacant space between lines 2 and 4. It should be read between the first and second letters of line 4, thus—. . . וזבח אש ילך ל[אלב ז <ל><כל המסכת ז זבח "and the sacrifice which they are to bring to this god, to sustain this image, is a daily sacrifice of. . . " It appears that "this god" and "this image" are virtually identical; in other words "this god" is the statue of Baal KRNTRYŠ on which the inscription is carved. If a closer study of the statue itself is feasible, it may reveal something more as to the nature of the god. ויל̇ך—probably plural Il'il from the root of הלך in the sense of "lead, produce, bring." לכ̇ל —"to sustain, nourish, support" from the same root as Hebrew כול. מסכת—"image, statue" from the root of Hebrew נסד "set up, instal."

III 1. ובע̇ת ח[רש (A IV 4-5). The restoration is an obvious one, in view of Exodus xxxiv 21[1] and Genesis xlv 6; as it happens, the missing letters are among those present in the very fragmentary A text. The phrase must be understood as "and, alternatively, at the time of ploughing," for there would be no point in stipulating for an additional victim at certain periods vaguely defined in terms of the agricultural rather than the religious calendar. The sacrifice appointed is a daily ox, for which a sheep or goat may be substituted at those seasons when the loss of a draught animal would cause hardship to a husbandman. The sacrificial victims are of so common a type as to tell us nothing new about the god.

[1] Where, however, it is possible that the phrase should be understood *per merismum* for "at all seasons of the year" rather than specifically as "(even) at the two notoriously busy and urgent times."

III 2-7 (A III 16-IV 1). The record of the blessings enjoyed by 'ZTWD at the hands of the newly introduced deity is placed in A before the statement of the sacrifices instituted. The wording is identical except that B adds the phrase וכל אלן קרת (III 5), tactfully omitted by the statue inscription,[1] and less correctly omits the preposition ב before the three nouns of III 3-4 (A III 17-18), a tendency already noticed in II 12. It is hard to see the reason, accidental or deliberate, for the displacement, but A's is the better order, the institution of the sacrifice being prefaced by a statement of the blessings bestowed by Baal KRNTRYS upon 'ZTWD and being followed by a pious assurance that as they had enjoyed plenty in the past, so in the future the inhabitants of the city would continue to flourish and find themselves well able to afford this new daily exaction from their stock.

III 7. שבע ותרש (A IV 9).—"Sufficiency and inheritance, possessions," i.e. "abundant resources." תרש is from ירש ; cf. *J.A.O.S.* LXIV (1944), 81, n. 5.

III 11. ולבת—A IV 11-12 וכל בת.

III 12-IV fin = A IV 13-21.—Apart from minor disparities, such as דם [מ]כל א A IV 14 as against אם אדם B III 12-13, the differences between the two texts in this section are due to their different locations and perhaps also to considerations of space. Where B refers specifically to the effacing of 'ZTWD's name from the gateway, A speaks in more general terms ; where A refers to an enemy alienating 'ZTWD's town and giving it his own name, B adds a reference to the remaking and removal of the gateway which it adorns ; and while in A the statue-god himself is to vindicate his own and 'ZTWD's rights, in B the vengeance is to come from the

[1] In making this addition the drafter of B omitted to change the anticipatory suffix of לתתי from singular to plural. Or is the suffix to be understood to refer to the indirect object, and so to anticipate לאזתוד ? Cf. Gesenius-Kautzsch-Cowley, *op. cit.*, § 117 ff. In either event this is the only place in this inscription in which the suffix is redundant ; note the translation of B II 14 and I 17.

deities in general. Because of this last divergence, it is impossible to restore A IV 21 in the light of B. There is also some doubt as to whether the imprecation of B ends at III 18 or continues along the horizontal surface. On the one hand it is odd that the next orthostat should not have been used. if required ; the stone-cutters must have made some estimate of the space required, and should not have misjudged so seriously[1] ; and "the Baal of heaven and El who holds the earth" is a natural combination, though one without any precise parallel. But, although the reading is imperfect, it is difficult to see what the marginal text could be other than a continuation of B III ; the phrase אל קן ארץ ושמם[2] has a good Canaanite ancestry,[3] and the whole can be read as a continuous sentence, ending with the same series "king, potentate, man (of renown)" with which the imprecation began. It is uncertain how much must be supplied at the end of the sentence. ימח, like ושת in III 14, 16 is an infinitive used absolutely,[4] and the *waw* is apodotic. ממלכת—"royalty, kingly being" as in I Kings x 20, Amos vii 13, Haggai ii 22 (cf. LXX) and regularly in Phoenician.

That the author of the inscription is indeed the king of the Danunians is clear, quite apart from the statement of I 1-2, from the way in which he refers to the kings before him and those with whom he dealt as a respected equal, from the character of his military and public works, and from his

[1] The spill-over of III 1 on to the next orthostat suggests that it was only then that the estimate was made ; that in III 4 is due to the correction of an accidental omission. III is one line less than II, and three lines less than I, which may account for the failure to accommodate the inscription within the three columns.

[2] One suspects that וישמש of the facsimile is a mis-writing or a mis-reading, either ancient or modern, of ושמם.

[3] Cf. Genesis xiv 19, 22 and the commentators thereon. I regard the word אל as plural construct (cf. Gesenius-Kautzsch-Cowley, *op. cit.*, § 130 e) and the whole phrase as an emphatic variant of בעל ואלם (I 8, II 6, III 11).

[4] Here, however, it is minatory or precative ; cf. Gesenius-Kautzsch-Cowley, *op. cit.*, § 113 ee.

relation to the statue-deity. It is equally clear that the Danunians were at this time in complete independence ; the date must therefore be in the middle or latter half of the eighth century, certainly before the subjugation of Quë by Sargon, but not necessarily before the first of the brief Assyrian conquests.

It seldom happens that bilingual people are equally at home in both of their tongues, and this seems to be true of the eighth-century Danunians. While we do not yet have sufficient knowledge of the Hittite idiom to ascribe any particular usages to its influence, and while some of the expressions[1] belong to the common Oriental stock, the over-use of the infinitive for a finite form, the clumsy use of the relative with the preposition in B I 14, the tendency of B to omit the preposition ב, the lack of a suffix in the circumstantial clause in A III 8, the awkward retention of one in B III 4, the paratactic syntax of B II 9 and 17, whereby the author seems to repeat himself, whereas the latter occurrence of the phrase is doubtless intended as a temporal clause—" and when I had built . .," provide a combination of features such as to suggest that while the B text is based more or less directly upon A, both ultimately derive from the hieroglyphic version, though with what fidelity cannot yet be ascertained.

The names of the divinities mentioned reflect this state of affairs. Bossert's interpretation of the opening words of the hieroglyphic text shows that the Semitic Baal has been identified with the Anatolian weather-god ; " Rashap of the he-goats " is probably another Semitisation of a Danunian deity, and the writer has conjectured that the new cult is that of the Tarsian Sandan, who is here given a native appellation " suzerain of Tarsus " and identified with the Semitic Baal, and who later is called " the Baal of Tarsus." These identifications represent an accommodation of native Cilician or Danunian religion to the frontier environment in which there was a strong Canaanite ele-

[1] E.g. " made me a father and a mother to. . . " (B I 3), " horse upon horse. . . " (B I 7).

ment.[1] It would therefore be wrong to claim the Danunians as Semites in any real sense. The new evidence regarding the Danunians re-opens the question of their relation, if any, to the classical Danaans, and the relationship of the Danunians to Quë requires further investigation. But the greatest contribution must come through the unlocking of the key to the hieroglyphic Hittite treasury, and the learned world awaits with anticipation further news of Professor Bossert's work of decipherment and an opportunity of examining the texts and their interpretation.

[1] This aspect of the historical setting of the inscription is admirably dealt with by Alt, *loc. cit.*, to whom the writer is also indebted for pointing out that the assumption that it was to Quë that Tiglath-Pileser III deported 30,000 Syrians in 743 rests upon an improbable restoration of a defective text.

1. Facsimile of Karatepe Phœnician inscriptions

Leo portae infimae

III—*cont.*

THE BATHS AT KHIRBAT MAFJAR

By R. W. Hamilton

The last of twelve winter seasons of excavation, in the spring of 1948, completed the clearance of the principal buildings comprising the ruins of Khirbat Mafjar, the country residence of an Arab prince, perhaps the Caliph himself, which was constructed according to epigraphic evidence during the reign of the Caliph Hisham, 724-43 A.D.

The buildings are three in number, the Residence or Palace, a Mosque, and a Bath, grouped along the west side of a forecourt common to them all. A fourth ruin, in the forecourt itself, is that of a square pool sheltered by a massive octagonal pavilion.

It was only in 1944 that we decided to embark on the clearance of the Bath, the last of the buildings in order of excavation. We knew nothing about the site at that time, except that it was scored by the pits and trenches of stone-looters, and that a few fragments of carved stone lay scattered on the surface.

There were four seasons of excavation. The last took place in the shadow of civil war. Jericho was full of arms, and armed bands frequently crossed the site. None of our people, however, was molested ; and thanks largely to the determination of Mr. D. C. Baramki, who was in immediate charge of the work, and to the skill and enthusiasm of Mr. G. U. S. Corbett, who joined us as Architect from Public Works Department, it was possible to clear the whole bath, to repair and photograph its extensive mosaic floor, to make the essential drawings, and finally to cover up the mosaics for protection before the end of April, 1948.

The building is not unique ; Umayyad baths exist at Quseir 'Amra, Qasr al Heir al Gharbi, Hammam as Sārakh, and at Jebel Seis, to name four of the same period. But the

bath at Khirbat Mafjar is the most comprehensively equipped of them all ; and more than any other preserves a typical cross-section of the state of architecture and craftsmanship in Palestine one hundred years after the Moslem conquest.

The most striking feature of the plan (Fig. 1) is a large square hall, through which the baths were entered by a monumental porch on the east.

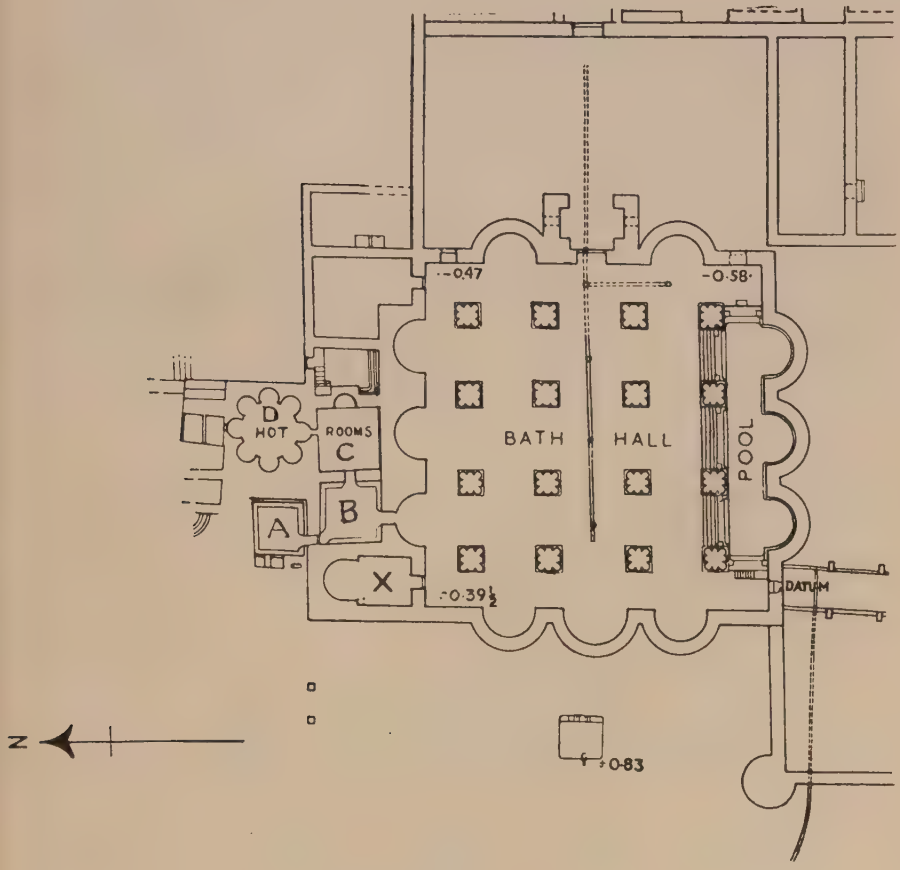

FIG. 1

The Bath Hall. Plan

The hall had semicircular exedrae in each of the side walls, and a swimming pool along the south. The latter was enclosed by a barrier, about five-foot high on the inside, with broad steps leading up to it from the main floor. It was rendered inside with waterproof cement. The water inlet must have been from a high-level, for there was no sign of it in the barrier itself or in the surviving back wall of the pool.

The remaining rooms of the bath were found clustered against the north side of the hall, on a much smaller scale, so that they gave almost the impression of an afterthought. But they conform, in fact, to the normal sequence of cool and hot rooms in a Roman provincial bath ; and there can be no doubt that they are all part of a single and contemporaneous scheme. In that scheme the big hall seems to represent a combination of dressing-room or *apodyterium* with a cold-room or *frigidarium*, of which a cold-water pool was the essential feature. It gets the character of *apodyterium* from its situation immediately within the entrance, and from a series of wooden benches, the existence of which we were able to infer from a continuous series of slots which skirted the bases of most of the walls and piers.

A marble-encased door in the western apse of the north wall led into the hot rooms by way of an ante-room, B. Room B can have been little more than a passage-way, for it had two other doors, one turning right into the heated rooms, C and D ; and the other leading straight on into a second small room, A. Both rooms A and B were furnished with benches round the walls ; and both were paved and panelled with marble slabs, which were found to have been systematically ripped off the walls and floor. Room A was supplied with water from two containers in its west wall, and was perhaps used for some sort of ablutions.

Two other doors led out of the north side of the great hall. One of these, in the north-west corner, gave access to a domed room containing a raised dais with an apse at the

inner end.[1] This room was sumptuously decorated with mosaic floors and carved incrustations on the walls. The dome was of brick and rested on a high cylindrical drum on pendentives, all encrusted with stucco ; the drum was pierced by six round-headed windows which were fitted with carved plaster grilles. The dais had a semi-dome and barrel vault in ashlar masonry. I take this room to have been an apartment reserved for the private relaxation of the owner of the palace (room marked × on plan, fig. 1).

The third door led to a small L-shaped courtyard, with covered sides, which appears to be a latrine.

So much for the plan of the building. When we began to excavate the baths we were soon confronted with enormous piles of masonry, much of it sticking, as it had fallen, in great blocks of a score or more stones together. It was clear that with good fortune the evidence for a complete or nearly complete reconstruction of the building in its elevation might be recovered. Perhaps the brightest hopes were not quite fulfilled ; for most of the roof had been vaulted in brick, which in its fall had disintegrated beyond recognition. Still, we did in the end succeed in building up, without too much guess-work, a fairly reliable picture of the main structure of the hall. Pl. XIII, fig. 1[2].

The roof of the hall was planned in 25 square bays, vaulted in brick, and carried by arches on 16 massive piers. These piers were composite in plan, with half-round shafts at the corners and flat pilasters in the middle of each side.

[1] A preliminary note on this room was published with photographs in the *Illustrated London News* by Mr. D. C. Baramki. See also PEQ, 1946, Pl. V, Fig. 1.

[2] Figure 2 shows part of a cross-section through the centre of the hall, as we imagine it to have been, looking westwards. I owe the drawing to Mr. G. U. S. Corbett, formerly Assistant Architect in Public Works Department, who joined the Department of Antiquities and assisted in the work at Khirbat Mafjar during the whole of the last season. The drawing must be regarded as provisional, especially above the tops of the windows ; up to that level the margin of error in the heights cannot be very great, for the masonry courses indicated are based on actual measurements and ascertained sequences.

They seem at first glance almost to anticipate the composite Romanesque pier. But the resemblance is only superficial, for the plan bears no direct relation to the superimposed vaulting. A truer comparison, perhaps, would be with the rounded corners and flat sides of brick-work piers in Mesopotamian architecture. They have bases and capitals to match ; the latter decorated with acanthus foliage resembling in style some capitals previously discovered in the mosque.[1]

Round arches, springing from masonry imposts about 1.5 m. high above the tops of the capitals, connected the piers.

The walls above these, both internal and external, were pierced by groups of three round-headed windows set at intervals of 1.34 m. There was evidence of glazing in the windows of the external walls.

In contrast with the arches connecting the piers, those which spanned the space between the external walls of the hall and the ranges of piers nearest to them were probably not carried up to accommodate windows ; the outer aisles were consequently roofed at a lower level than the inner bays. On the other hand the square at the intersection of the two central aisles rose above the surrounding vaults to a dome on a cylindrical drum carried by pendentives. The drum contained eight windows alternating with round internal niches. The whole structure, thus comprising a central dome surrounded by abutting vaults at successively lower levels, displayed a strongly Byzantine character.

The whole interior surface of the hall, including both the walls and the piers, was coated with plaster. Up to the window-sills this was white ; but above that level it was painted to represent variegated marble panels, relieved here and there by floral and geometrical patterns. In the course of the dig we were time and again held up by the necessity of dealing with large fragments of plaster, usually painted in rather ugly imitation of grey-and-white veined marble arranged in symmetrically reflected patterns, which adhered on all four sides to great chunks of walling fallen from

[1] Q.D.A.P. Vol. XI, pp. 55 ff.

between the windows and still sticking firmly together. The limestone at Mafjar, quarried from Khirbat as Samra near Jericho, is very porous, and it was practically impossible to detach most of this plaster from the masonry to which it adhered; moreover many of the blocks were far too heavy to move as they were. In the end we were often reduced to cutting these up after photography, and so removing them, in order that the excavation might continue. Between each window and the next, on each internal wall-face, there were three little niches, grouped one above two, and painted rather vividly in yellow and black and red and green. The arches over the windows were done with alternate bands of red stippling on yellow, and vice versa, in imitation of coloured marble voussoirs, of the sort that was to become popular in the Mameluke architecture of Egypt and Syria.

Round each of the exedrae, except those containing the pool, there were two tiers of niches, in the lower of which one can imagine the bathers putting their shoes and clothes. Facing the pool there was a single tier only. All the niches of the upper tier had hemispherical niche-heads, elaborately carved. Most of the designs displayed scrolled leafy stems ending in those exotic hybrid flowers or fruit which are typical of Umayyad Syrian ornament, and of which the finest examples are to be seen in the splendid series of carved cypress-wood panels formerly to be seen in the roof of the Aqsa Mosque. One of these niche-heads contained a roundel with a winged dragon flaunting a peacock's tail, a pure Iranian theme which occurs repeatedly on Sasanian textiles, seals and metal-work. There could be no more vivid demonstration of that borrowing of ideas from Iranian art which gave so much of its character to early Islamic work.

Each of the exedrae was flanked by small columns carrying acanthus capitals.

The heated rooms were reached from the main hall through room B, a kind of ante-chamber connected with the western exedra on the north side. The first room to be entered was that marked C on the plan. Its floor, which

had disappeared, was carried by rows of brick arches on square brick columns, some of which had remained complete. The space beneath the floor, or hypocaust, was heated by a furnace of which the opening was seen at the far side of the room from the door. The furnace was a straight brick tunnel ; and above it a niche in the wall contained a receptable for water, lined with marble. Lying as it did directly above the furnace, the water in the receptacle must have been kept at a high temperature.

The heat from the hypocaust was carried up the walls of the room by vertical pipes set close together and concealed by a thin surface covering, which has now disappeared.

There were brick benches round the walls ; and these too were threaded through with hot-pipes at intervals. Parts are still *in situ*, though they have slightly subsided.

A door in the north wall led into the second hot room, D. This was on a concentric plan, with eight horse-shoe niches round the wall. The debris contained many fragments of glass mosaics, which must have fallen from little brick domes over the niches. The fragments showed leafy designs in dark colours against a gold background. The walls of this room survived for the most part almost up to the springings of the semi-domes.

This second room, I imagine, was kept at a rather higher temperature than the first. Its hypocaust was identical in construction with the other, and was connected with it by an opening under the door between the two rooms ; it was also independently heated by a second furnace beyond the opposite, or north side of the room.

This second furnace was more extensive than the former. It consisted of two brick tunnels intersecting at right-angles, crosswise. Again there was a water-tank directly above the furnace, and it seems that the steam emitted by this was drawn back into the hot-room by a kind of window, otherwise unexplained, which pierced the wall directly above the furnace passage.

Directly east of the first hot-room the plan shows a capacious stoke-room. A flight of stairs with two small landings against the north and west walls of this room leads down to the floor, which is flush with that of the furnace. The door at the head of the stairs gives on an area inaccessible from the bathers' premises, which we have not fully explored. There is room for plenty of fuel. The opening to the furnace is at the base of a projection in the west wall of the stoke-room, which contains the hot water tank belonging to the first hot-room. The water from this tank could be drained off by a channel which skirted the south-west corner and south side of the room, passing then through the east wall into the adjacent compartment, the next to be described.

This was in effect a small L-shaped courtyard of which the most prominent features were a fountain in the centre and a deep drain, continuous with that passing through the stoke room, which ran round three of the sides. The drain was covered by a kind of slotted bench, formed by rows of corbels projecting from the back walls, with a screen of masonry meeting them in front. The whole surface of the bench, including the sides and ends of the slots, was rendered with waterproof plaster. The front sides of the slots were bevelled to extend the openings to within a few inches of the front of the bench.

There were four masonry piers probably intended to support a roof sheltering the sides of the court ; the central square containing the fountain would have been left open to the sky.

There was much discussion during the dig about the function of this structure. I have little doubt that it was a latrine, the decisive factors being the deep and capacious drain, the relative isolation of the court from the other rooms of the bath, and the absence of any other place which could have served the purpose. But it is certainly puzzling to find the slots ranged awkwardly on a bench, and set at close intervals with no provision for privacy.

As seen in Pl. IV, figs. 1 and 2, the whole floor of the main hall was paved with patterned mosaics. Considering that the

massive structure of the hall, mostly in solid masonry, had collapsed upon it, it was a pleasant surprise to find that the greater part of the floor had survived unharmed, with only a few minor dents and breaks.

The mosaics were composed throughout of different kinds of limestone. We counted sixteen different tints in red, yellow, greeny-blue, grey and white, with minor variations amongst individual stones.

There were long runner patterns down the outer aisles ; but elsewhere, as a rule, each bay and each inter-columination had its own design. I could not detect any logical scheme in the arrangement or sequence of the patterns. Beneath the dome the central bay was filled with a great circular carpet (visible in Fig. 3), a whirling design of intersecting arcs and circles, enclosed in a twisted-ribbon border with reciprocal compartments containing slender leafy sprays. Consummate craftsmanship had combined in this carpet majestic over-all proportions with a finesse in the gradations of colouring and scale which is rare amongst the many extant mosaic floors of Palestine. In some others of the designs, on the other hand, labyrinthine geometrical interlacings of a curiously incoherent character were elaborated to the verge of the grotesque.

The finest of all the floors was found in the little private room at the north-west corner of the baths.[1] The floors of both the square and the apsidal parts of this room, and also of the benches which skirted the sides, were of mosaic.

The square floor had a straightforward textile pattern, with a double border, and tassels at the four corners. No doubt it was meant to represent a rug.

The floor of the apsidal dais displayed a bearing fruit-tree, with a scene of three gazelles and a lion. It must be about the latest in date of all extant mosaic floors in Palestine, and it is certainly the finest. I do not remember any close parallel, among its predecessors, either to the technical and artistic excellence of the design, or to the pathos and descriptive intensity of the theme.

[1] See note on p. 43 above.

The tree is either an apple or a citrus, perhaps an orange ; if the latter, the picture must be about the earliest existing evidence for the orange in Mediterranean countries.

The foliage is drawn in flat planes of colour overlaid. as it were, one on the other, with the darker shades at the back. There is a single cable border, fringed with a row of tassels. These tassels, I suggest, give the clue to the picture : it is derived from Hellenistic painting (still flourishing in the eighth century, as we know from contemporary frescoes at Quseir 'Amra and our own site), by way of an oriental carpet.

We found at the bottom of the apse wall some fragments of its plaster incrustation still in position. The designs were disposed in square panels surrounded by a leafy scroll border. Besides the familiar vine and acanthus leaves many of the enclosed patterns were composed of exotic flowers with a strongly Iranian character.

This kind of plaster work was carried over the entire surface of the room, including the drum and dome.

We were lucky to find big fragments of the dome lying among the debris, and we were subsequently able to reassemble a good part of it in the museum at Jerusalem. The central feature was a radial design with alternating acanthus leaves and human heads.

The entrance to the Baths produced another big group of sculptures in plaster. I left the museum staff at the end of April still working on these. The porch was covered with a brick dome (Pl. V, fig. 2), carried as usual by a high drum on pendentives. Round the drum there were niches, twelve in all, containing each a statue. The statues represented dancing girls and male athletes, presumably in alternation. A cornice ran round the base of the drum, and on this rested a row of couching gazelles and other animals. A row of partridges surrounded the base of the dome. Four dancing male figures decorated the pendentives, their arms raised as it were to support the cornice. The remaining surfaces of the porch were entirely covered with floral or geometrical patterns.

In conclusion I may perhaps allude to some aspects of the building which seem to have a special interest.

Architecturally it illustrates the notable, and perhaps surprising, developments that had taken place in Syrian architecture during the hundred years which had passed since the Moslem conquest, a century which might well have been expected to be one of stagnation or even decline.

Brick vaulting, little if at all used in the Christian period, had come definitely into fashion ; and here we find it used in combination with stone arches and ashlar semi-domes as the principal roofing material in a large building of notably Byzantine character.

In decoration the principal novelty was the employment of gypsum plaster both as a medium for sculpture, and as a structural material in windows and balustrades. Plaster enables the incompetent sculptor to produce a striking effect with very little trouble ; but it also greatly extends the range, and lowers the costs, of the skilled artist. Plaster-work is therefore a sign of mixed strength and weakness in Umayyad architecture. Its introduction on a large scale points to Mesopotamia and Iran as sources of influence ; and this is borne out by the strongly Iranian flavour of many of the decorative themes.

Lastly, it is striking to observe that so far from exhibiting any signs of exhaustion at this period, the work of the ordinary craftsman had taken on a new lease of life, with originality running riot, sometimes even outstripping judgment. And this applies equally to the arts of mosaic and of sculpture.

One other aspect of these Umayyad buildings which ought to be mentioned concerns their social implications. Our bath-house is clearly a development from the ordinary public baths of a provincial Syrian town. But it represents also something more than a standardized utility. The enlarged *frigidarium* with its monumental entrance and numerous side-doors ; the elaborate decoration and generous lighting ; the suggestive display of human and animal sculptures ; all these features imply, I suggest, that the bath-

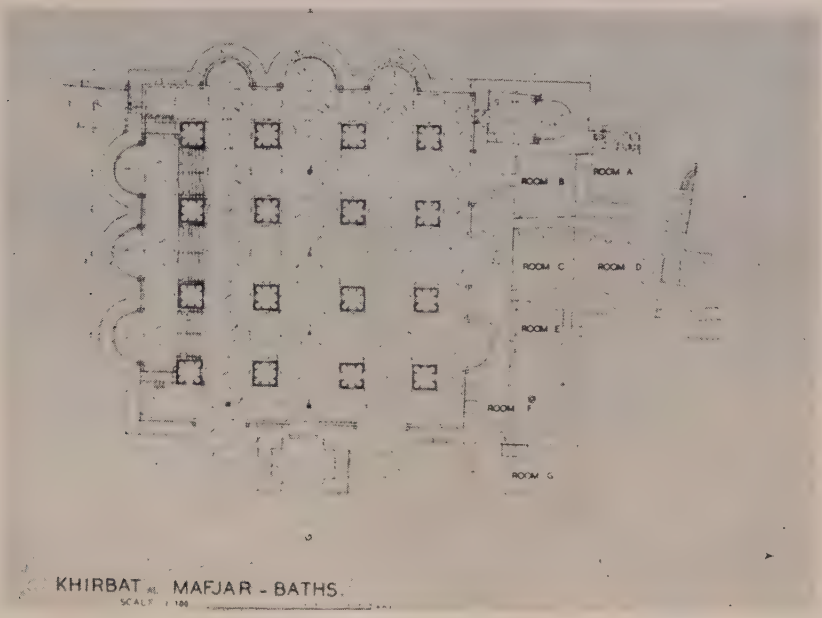

FIG. 1. MOSAIC FLOOR OF HALL. PLAN

FIG. 2. MOSAIC FLOOR OF HALL

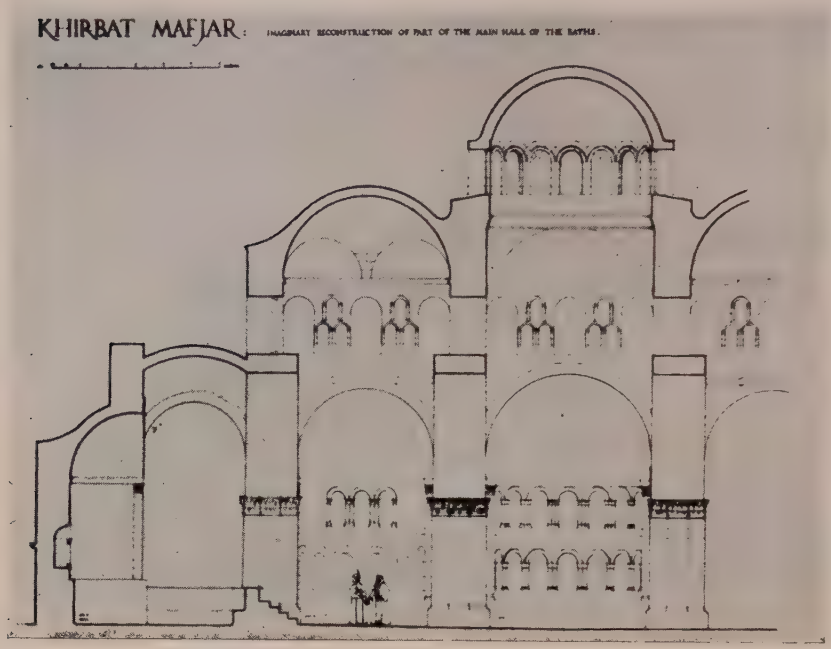

FIG. 1. MAIN STRUCTURE OF HALL

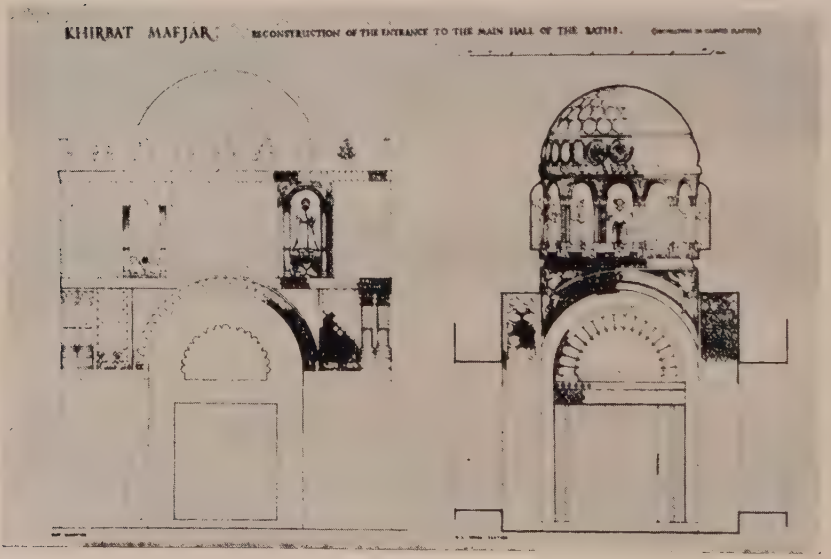

FIG. 2. BRICK DOME OVER THE PORCH

house in Umayyad society had a specialised social aspect additional to its obvious utilitarian purpose. Such a building as this, or the painted baths at Quseir 'Amra, at all events provide a curious commentary on the reaction of early Moslem rulers to their newly-acquired wealth, in particular illustrating the effects of their contact with those material and aesthetic amenities with which the Christian and Persian provinces could charm and perhaps seduce their Arabian conquerors.

NOTE ON A PHŒNICIAN PAPYRUS FROM SAQQARA

By Professor A. Dupont-Sommer

A short time ago M. N. Aimé-Giron published a Phœnician papyrus found in the shaft of a *maṣṭaba* at Saqqara with a number of demotic papyri.[1] This document, which is complete, consists of 5 long lines, without reckoning the address on the reverse ; it is the more interesting because only one other Phœnician papyrus[2] is known.

The text is a letter to a Phœnician lady named *Arišut*, who lived at *Taḥpanḥes*, modern Tell Daphne, from a lady named *Baš'u*, also a Phœnician, living at Memphis. The letter deals with money matters, very natural in Phœnicians, the commercial people of antiquity. The script is more archaic than the cursive writing of the Phœnician inscriptions on potsherds found at Elephantine,[3] so the date suggested by epigraphy is earlier than the 5th century B.C.[4]

The reading of the first two lines proposed by Aimé-Giron seems absolutely certain. But in the last three lines a certain number of signs are obliterated or of uncertain reading, and the published photograph does not suffice to settle doubtful points. Under these conditions, the exact interpretation of the end of the letter is very difficult, and we prefer to say nothing about it before being able to consult the document itself.

[1] *Annales du Service*, Cairo, XL (1940), 433-460, pl. XI.

[2] Also published by Aimé-Giron in *Bulletin de l'Institut francais d'Archéologie orientale*, XXXVIII (1939) 1-18, pl. I, no. 1.

[3] See M. Lidzbarski, *Phönizische und aramäische Krugaufschriften aus Elephantine*, Berlin, 1912.

[4] Aimé-Giron suggests the period of Amasis, 568-525 B.C., on the ground that there was a fragment of a demotic papyrus, in the "abnormal" character, in the find which included the Phœnician papyrus.

The position is not the same in the case of the first half of the letter, where the text is well established. This is the transcription and translation given by Aimé-Giron :—

(1)
אמר · לאחתי · ארשת · אמר · אדתך · בשא · ושלמאת · אפאנך ·
שלכ · ברכתך · לב (2) עלצפן · ולכלאל · תחפנחס · יפעלך ·
שלם · אפקן · הכסף · אששלחת · לי · ותנת (3) ן · לי · מש[כ]ל ·
. . . . · ר | (?) ½ (?) ⅙ ½ | |

" (1) I say to my sister Arisuth, your sister *Baš'u* says : ' Because you are in good health and I also, give blessings therefore to *Ba*(2)*'al Ṣaphon* and to all the gods of *Taḥpanḥes*, that they may sustain you in good health. The silver which you sent me has reached me ; that produced for me (3) a weight (in shekels) $3\frac{1}{2}\frac{1}{6}$ (?) (plus a) q(uarter) (?) ' . . . "

Without making any change in the transcription of the scholar whose death is so much regretted, we believe that a markedly different translation can be proposed :—

(1) Say to my sister *Arišut* : " Your sister *Baš'u* says : ' And are you in good health ? I, too, am in good health. I bless you by *Ba*(2)*'al-Ṣaphon* and by all the gods of *Taḥpanḥes*. May they make you to be in good health ! Would that I might obtain the silver which you have sent me ! And you will give me (3) a weight of 320 (shekels) 1 q(uarter) (?) ' . . . "

Now for a justification of our translation at every point where it differs from that of Aimé-Giron.

The first word, אמר, is not an impf. 1st s., " I say," but an imperative s. " Say ! " The writer of the letter is thought of as addressing a messenger. Similarly, for example, in the letters from Mari, *a-na be-lí-ia qí-bí-ma*, " Say to my lord " ; *a-na a-bi-ia Zi-im-ri-li-im qí-bí-ma*, " Say to my father Zimri-lim," etc.[1] The second אמר, on the other hand, is surely a 3rd p.s. fem. pf., as Aimé-Giron interprets it, " your sister, B., says." In letters the formula

[1] *Revue des Études Sémitiques*, 1942-5, pp. 9 ff.

is generally abridged by the suppression of the two verbs, for example, אל א]חי פרור אחוך בלטר, "To my brother Pir-Awurr, your brother Bel-eṭir" ;[1] אל אחי פלטי אחוך הושיע[ה], "To my brother Piltai your brother Osias" ;[2] אל אחי חגי אחוך ירחו "To my brother Haggai your brother Yarḥō,"[3] etc.

ושלם את is translated by Aimé-Giron "because you are in good health" ; he treats ו as subordinating, and he considers שלם "a participle or an adjective in the construction with a pronominal subject." But if שלם was a participle or an adjective the feminine, שלמת, would be required. Here it is actually a noun, שלם "health," and the phrase is interrogative, cf. השלום אביכם "Is your father in good health?" Genesis xliii, 27 ; השלום אתה "Are you in good health?" II Sam., xx, 9, etc.[4] As for the ו before שלם, it is the "*waw* expressing feeling,"[5] particularly common in questions : ואיו, "And where is he?" Exodus ii, 20 ; ומי אביהם, "And who is their father?" I Sam. x, 12, etc.

In אף אנך שלם, the word שלם is again in this case a noun in the predicate, שלום, just as in the preceding phrase : "I too am in good health." Aimé-Giron took this second שלם as an imperative *pi'el*, with the accusative ברכתך : "Fulfil your blessings." That is forced.

ברכחך לבעלצפן : "I bless you (=I salute you) by Ba'al Saphon" There is just the same formula in an Aramaic

[1] Aramaic ostracon from the city of Ashur published by Lidzbarski, *Altaramäische Urkunden aus Assur*, Leipzig, 1921.

[2] A. Cowley, *Aramaic Papyri*, no. 40.

[3] Aramaic ostracon from Elephantine published by A. Dupont-Sommer, *Revue de l'Histoire des Religions*, cxxviii (1944), 28-39.

[4] The syntax of the archaic Phœnician inscription from Nora, C.I.S. I no. 144, is similar : יצלם את שלם צר, "May it be prosperous, may Tyre be prosperous !" see our new interpretation of this document in *C.R., Académie des Inscriptions et Belles Lettres*, 9 January, 1948.

[5] cf. Joüon, *Grammaire de l'Hébreu biblique*, p. 536 (§ 177 m).

ostracon which we published recently:[1] ברכתך ליהה, "I bless you by Yahō. . ." We consider *brk l* practically equivalent to *brk b*, the only phrase attested in biblical Hebrew. The expression *brktk l* seems to be directly influenced by the current formula of greetings, *barūk attā l.* . . , "Be thou blessed by . . ," which occurs, for example, I Sam. xv,13 ; Ruth ii, 20. Similarly the phrase *berīk l* . . . , "blessed by . . ." occurs constantly in Aramaic. In this phrase the *l* of the relation of one thing to another has practically the significance of *b*. The same appears to be true of the verb in the perfect *pi'el* : "I bless you by . . .," which essentially, means "I declare you blessed by. . ."

יפעלך ישלם does not mean "in order that they may sustain you in good health," as a subordinating conjunction would be required, but "May they make you to be in good health !", optative. ישלם is once again here a noun used as predicate : it cannot be, as Aimé-Giron suggests, an active participle written without the form of the feminine. Why should the feminine ending *t* be suppressed ? The turn of prase is perfectly correct, just as much so as אנך שלם and שלם את.

The word אצקן would be, according to Aimé-Giron, 3rd p.s.m. pf. hiph'il of the verb צוק, "to meet by chance," followed by the 1st p.s. suff. pron. : "Silver reached me." But the preformative of the causative perfect in Phœnician is normally י, not ה or א. אצקן should be treated, according to us, as 1st p.s. impf. followed by the cohortative particle ן (Hebrew נא-)[2] ; it is causative of the root פוק met in the sense "to find, obtain," both in Hebrew, Prov. iii 13 ; viii, 35 ; xii, 2 ; xviii, 22 ; in Ugaritic. Keret, 12,[3]

[1] *Revue de l'Histoire des Religions*, cxxx (1945), 1-28.

[2] One might also interpret it as an impf. energicus of the type *yqtln* attested at Ras Shamra, cf. C. H. Gordon, *Revised Ugaritic Grammar*, 62, §9. 8.

[3] Gordon, *op. cit.*, 262, no. 1624.

and in Phœnician, Tabnith, 3.[1] We translate then, "Would that I might obtain the silver. . . !" There is, however, the possibility that the imperfect here must be allowed a different *nuance ;* the point will not be cleared up till the document is explained in its entirety.

In ותנתן לי the verb is 2nd p.s. fem. impf. of the *qal:* "and you shall give me." There is, however, the possibility that the ו has here the "conversive" force : "And you have given me. . ." In this case, too, it is necessary to await an explanation of the general sense. The form תנתן is a little surprising, as one would rather expect תתן as in C.I.S. I no. 1, line 9 : cf. יתן, impf., in *Kilamū*, 8 ; C.I.S. I no. 165, line 21. The root in the perfect *qal* is, as is well known, יתן in Phœnician and Ugaritic, but נתן in Hebrew and Aramaic. In the imperfect it is impossible to say whether the root is יתן or נתן since both warrant יתן, תתן in the imperfect. In our תנתן the root is probably נתן, the first radical נ being retained,[2] but if need be, the נ could be explained as dissimilation of the doubled consonant *t*.[3] However that may be, it is not possible to treat תנתן here as the 3rd p.s. fem. impf. *niph'al* of יתן, as Aimé-Giron does, *tinnaten*. The translation to which he is led by this *niph'al*, "that produced for me weight. . ." seems altogether forced.

After משׁ[ק]ל comes the figure 3, then there are two barely legible signs, in which Aimé-Giron proposed to recognise "the demotic signs expressing $\frac{1}{2}$ and $\frac{1}{6}$," then two other characters, probably ר1=1q(uarter). It seems to us hardly probable that the two doubtful signs can be demotic forms, the less so because $\frac{1}{6}$ could hardly be placed between $\frac{1}{2}$ and $\frac{1}{4}$. Perhaps we ought to read the numerical sign for

[1] cf. Z. S. Harris, *A Grammar of the Phœnician Language*, 136.

[2] cf. in Neo-Punic the perfect *niph'al*, נגתן, instead of נתן Harris, *op. cit.*, 44.

[3] Cf. Harris, *op. cit.*, 30.

100, followed by the numerical sign 20, which would make a sum total of 320 and a quarter shekels.

A. DUPONT-SOMMER.

NOTE ON BLESSINGS

Professor A. Dupont-Sommer's interpretation of ברכתך as 1st p.s. pf. with pronominal suffix is indisputably correct, and the parallelism between ברך ל and ברך ב which he has established from his wide knowledge of the texts is instructive. There are two distinct religious ideas. (1) You can bless a man " by " a god, or " by " *the* God, in the same sense that you bless him " in the name of " God. That is ברר ב. It implies that God has given you special powers. (2) You can, as an ordinary man, mention another man to a god, when you are in the god's presence, as deserving your blessing ; that is you " mention his name for good," " bless " him " to " the god, in order to make the god bless him.[1] That is ברך ל. The instances of ברך ל cited do not prove the identity of the religious ideas implied in the two phrases ; the use with ל seems only to occur in texts implying polytheism, which is not surprising.

SIDNEY SMITH.

[1] This is the idea expressed in the דכיר or *μνησθῇ* inscriptions, the type to which so many *graffiti*, especially the Nabataean *graffiti* in the Sinai peninsula, belong.

KURDANEH

By Julius Jotham-Rothschild

Halfway between Acre and Haifa and some three miles inland is a swampy area known by the Arabs as Ayūn el-Bass, the springs of the Swamp, which, during 1942-1943, has undergone a complete change. These swamps with a considerable number of springs of brackish water have been drained by the Government of Palestine to relieve once and for all the Plain of Acre of malaria which, for thousands of years, had spread from here as far as the villages of Lower Galilee. These swamps, which covered an area of about five hundred dunnams, were the ideal breeding-place of the malaria-carrying Anopheles which carried the often deadly disease into the tents and huts of the Ghōr bedawis who, since time immemorial, have inhabited the plain of Acre. The high mortality due to this disease, and the weakness of those who have recovered after a long period of illness, has prevented the population from increasing ; the innumerable tombs scattered over a wide area also bear witness to the many sacrifices the " God of flies " (Baal-Zevuv) demanded from the population. They were far too weak to till the otherwise fertile soil, and made a living by gathering the reeds growing in the swamps for making into mats and all sorts of wickerwork which they sold in the markets of Haifa and Acre. Their food consisted mainly of buffalo milk and bread, and sometimes fish brought from the waterholes of the swamps, but vegetables would not grow in the sand which contains a high percentage of salt. These saline sand-dunes which spread far inland and date from a time when the Mediterranean reached the hills of Lower Galilee, account also for the poor vegetation, a few palm trees, figs of a very inferior kind, willows, some blackberry bushes, different kinds of Labiae and broom. However,

tamarisk bushes predominate, which prevents the sand from shifting and permits here and there the formation of narrow patches of soil. The heat of the summer khamsins destroys quickly that which the winter rains have caused to grow, but in spring the whole plain is a carpet of multi-coloured flowers with birds singing in the bushes and butterflies sipping the sweet drops offered them by a variety of fragrant plants.

I first visited Kurdaneh in 1914 when I went gazelle hunting with my friend Mūsa Bustanji of Haifa. There was no road then as today connecting Haifa and Acre. Caravans and vehicles plying between the two cities used a track washed by the waters of the sea. Heavy cargo was carried by sailing-boats.

The high reeds of the Kurdaneh swamps offered a safe refuge for large herds of gazelles, for hundreds of jackals, for herons, pelicans, flamingos and water-hens, turtles, mongoose, frogs and rats, but chiefly for snakes which are so numerous that the Ghōr bedawis believe the king of the snakes resides in Kurdaneh. Woe to the man who kills a snake in the Ayūn el-Baas, the snake-king will take a terrible revenge, if not on the actual killer, then on any human being who dares to approach his realm.

Previous to the changes carried out by the Department of Health in 1942-1943 the waters of the various springs collected in small streams which eventually emptied into a fairly wide channel forming the well-known Nahr Na'amēn or Belus which, after a meandering course, reached the sea a few miles south of Acre. Both banks of the river were dangerous swamps, forming lagoons at different points, all breeding places for mosquitoes and therefore malaria infected areas.

All this now belongs to the past. The swamps have been properly drained and their water directed into a concrete-lined channel which carries it in a more or less straight course to the sea. As a consequence the old bed of the Belus had to be abandoned, filled up with soil and made dry. There will be no more malaria in this area. The tractor will

change the former wilderness into fertile fields, new and better settlements will grow on land which lay waste for thousands of years, healthy generations will live happily where in times gone by poverty and sickness prevailed.

In 1942 I spent six months in that region as a member of the Government staff supervising the work. In a number of water-colours and a model[1] I have endeavoured to show how that area looked before the drainage scheme was carried out, and how it looks now. I used my spare time and my knowledge of Palestine history and archaeology to study carefully all that came to light during excavations and the remains of the past which still exist here and there. Thanks to the generosity of the Director of Health and the Chief Engineer, Mr. Samakha, a horse was put at my disposal, without which I could never have reached many interesting spots except by foot (to walk for hours in the heat of the summer is no pleasure in Palestine).

Before giving an account of the observations made on the spot, some remarks may be made on the history of Kurdaneh and the river Belus which got its water from the Ayūn el-Bass situated at the foot of Tell Kurdaneh, a conspicuous eminence in the Plain of Acre rising 25 ft. above sea level.

Kurdaneh appears first in history at the time of the Crusaders. Its name is derived from a village or hamlet mentioned as Recortana, Riccordana, or simply Cortana, traces of which no longer exist. It must have been situated close to the eastern side of the swamps at the northern extremity of the Tell and was founded probably by a Crusader by the name of Richardus. After the departure of the Crusaders in A.D. 1291 the village was destroyed by the Arabs who later built a caravanserai on the site, traces of which still exist.[2] Finds made in the neighbourhood of the

[1] Now in the custody of the Department of Health.

[2] Recortana, ubi fluvius acon oritur. Sicardi cremonensis, Chron. p. 613. Cortana, quod in capite fluminis ante ptolemaidem fluentis situm est. Marino sanuto, p. 212. In castra domini quae praecesserant ad recordanam. Oliver.

caravanserai revealed that a small settlement must have existed on that site dating back to the MB age. At the western end of the swamps there were one or more mills which were the property of the Knights of St. John. The biggest of these mills, the lower part of which still exists, was driven by the river Belus (Nahr Na'amēn) whilst the others got their water from the springs carried by rock-cut channels which can still be seen. These mills are first mentioned in A.D. 1149. In A.D. 1262 a quarrel for the possession of the mills arose between the Order of St. John and the Knights Templars, which was eventually decided in favour of the Knights of St. John. The big mill situated at the southern bank of the Belus was a strongly fortified building with vaulted rooms and loopholes pointing in all four directions. It was taken over by the Arabs after the flight of the Crusaders from Acre, and was still working when I visited Kurdaneh in 1914. In the northern wall of the mill some stones with boss and margin can be seen dating from Roman times, but it cannot be said whether they formerly belonged to a Roman mill or were taken from some Roman building and inserted into the wall by the Crusaders. Towards the west and close to the mill I saw the remains of a bridge and a path paved in the Roman manner, besides a partly collapsed Roman wall of *opus caementicium* which, in early times, was built to dam the waters of the swamps which thus formed a big lake. In this way more power was gained for the mill, since the water of the Belus moves very slowly, the difference in level between its sources and the sea being only 10 ft. for a distance of over six miles. Close to the wall and towards the swamps excavations revealed the four piles of a lake-dwelling at a depth of 12 ft. South-west of the swamps at a distance of about one hundred yards a considerable dump of broken pottery was found dating from MBA, besides a well preserved hand-shaped battle-axe of Hittite origin.[1]

In A.D. 1217 a Crusader army of 50,000 camped at Kurdaneh on their way to the south. In A.D. 1228 the

[1] Now in the Palestine Archaeological Museum.

Emperor Frederick II when on his way to Jaffa pitched his tents at Kurdaneh and was met by a deputation of Arab notables to greet him in the name of Mālik el-Kāmel, Sultan of Egypt, with presents consisting of an elephant, ten race-camels, ten pure-bred Arab mares, some monkeys, a quantity of precious stones, some vessels of precious metal, and some of the finest brocade made by oriental weavers.[1]

On the western slope of Tell Kurdaneh the Ghawarneh bedawis have their cemetery, simple graves marked by a number of stones laid on the graves in the shape of an oval. They are remembered during the life-time of their relatives, and forgotten by the next generation. The Ghawarneh are a branch of the Ghōr bedawis living, as in the Huleh region, close to swamps which supply the food and water for their large herds of buffaloes.[2] They are Moslems but seldom go to a mosque for prayer.. Their huts are built of reed and often protected by a stockade. Ghōr is the Arabic for lowland, and Ghawarneh "the people of the lowland," by which the Palestinian Arab understands the region south of the Dead Sea. From there the Ghawarneh may have migrated into the swampy regions of Palestine at some unknown date. They are ignorant and very superstitious, and it is not easy to gain their confidence. Babies, when born, are immediately rubbed with salt to make their skin resistant to disease and the stings of insects, and are bedecked with chains of blue glass beads which as all the Arabs believe offer protection against evil spirits and the evil eye. The eyelids are painted by the mother with antimony (Kohl) a remedy against eye diseases known since the time of the Pharaohs. As soon as they can walk they follow their elder brothers and sisters to the swamps where they spend most of their youth with the buffaloes.

Who the inhabitants of the Kurdaneh region were before the Ghawarneh arrived we do not know. I discovered a rock altar with a blood groove amongst the many rocks west

[1] Ann. Margan, 37.

[2] Buffaloes were introduced into Palestine from India by the Sultan El Walīd between A.D. 705 and A.D. 715.

of the Tell and close to the track which connects Kurdaneh with the Haifa-Acre high road. Did they sacrifice to the god of the swamps in order to appease him when he punished them with fever and death? Did they intentionally select this rock for an altar because of its close proximity to the ancient cemetery and the dangerous swamps? There is no answer to these questions since we have no records and no knowledge of the aborigines of the Ayūn el-Bass and Kurdaneh.

The swamps have disappeared, and their waters now fill large fish ponds where fat carp live happily until their fate is sealed in the markets of Haifa, Tel Aviv and Jerusalem. The mill serves as living quarters for the Jewish breeder and the nearby pumping stations of the Oil Refinery of Haifa supplies the latter with water collected in a reservoir.[1]

At the time when the Plain of Acre was in possession of the Crusaders these mills, of which there were quite a number all along the river Belus, from Kurdaneh to Shahoota, were connected by tracks, partly paved since the time of the Romans. They were all fortified as the plain was sparsely inhabited and open to attacks from north, east and south, and they could signal to each other if help was needed. Kurdaneh was connected by a track with the mills of Doc, now Khān Da'ūk or Casale Docke of the Crusaders. This tracks leads due north and reaches Khān Da'ūk at a distance of about two miles. One has to cross the river over a now destroyed Roman bridge to reach the Khān and mills of Da'ūk. Of the mills of Da'ūk I could find no traces, but of the Tower of Doc[2] a vaulted hall and the foundations of the stronghold are still existent. According to Eraclius[3] the mills of Kurdaneh and Da'ūk were destroyed by Saracens in the summer of the year 1253. In A.D. 1263 Sultan Bibars destroyed the Tower of Doc, capturing four knights and thirty foot soldiers.

[1] On a Crusader map dating from the first half of the thirteenth century (now in Oxford) the mill of Kurdaneh (or Recordane) is clearly marked as a stronghold.

[2] Turris et Molendina Doc (Eracl. 440).

[3] Ann. de la Terre Sainte, 445.

The name of Da'ūk, which appears also in the vicinity of Jericho as the name of a spring ('Ain Dūk), and in the books of the Maccabees (the ancient castle of Docus or Dok, 1 Macc. xvi. 15), is without doubt derived from the Hebrew דוג (Jer. xvi, 16) meaning "fishing" or place where fish are caught. It appears also in the name of the Phoenician deity Dagon, represented as a bearded figure with a fish tail. Although excavations have never been carried out on Tell Da'ūk, it can with certainty be presumed that the site was occupied by some unknown people long before the Crusaders arrived in Palestine. The Tell Da'ūk is situated east of the river Belus (Nahr Na'amēn) and reaches a height of thirty feet above sea-level. It is flat on top with a slight slope to the west. The Crusader fort was built on this plateau measuring approximately 200 feet in length and 110 feet in breadth. The rooms and halls were built along the three sides of an inner courtyard or bailey. Plan and arrangement of buildings were similar to the Crusader fort of *Belvoir* (Kaukab el-Hawa) near Beisān. The outer defences consisted of a Barbican which also protected the bailey open to the west. The well-preserved hall north of the bailey, with a lancet arched roof, is about 100 ft long and 23 ft. wide, and has a fireplace in the southern wall. It was a khān during the Middle Ages, and is now used by Arab shepherds who find shelter there with their flocks when the winter rains sweep over the plain.

At the foot and west of the Tell there is the 'Ain Da'ūk or springs of Da'ūk, a dilapidated structure built over a well which can be reached by a flight of steps. The water of this well is strongly brackish and emits a sulphurous odour. The Arab shepherds, with whom I spoke when they watered their sheep at Ain Da'ūk, told me that the water was poisonous and unsuitable for human consumption, but harmless to animals.

The history of the river Belus, or Nahr Na'amēn, is too well known to need repeating. The plain which the river crosses saw many battles from the time of the Crusaders and Saladin (Salah ed-Din el Ayūby), to the time of

Napoleon I, whose artillery bombarded Acre in 1799 from the hill known as Tell el-Fukkhār, north-east of Khān Da'ūk. At the foot of the Tell and close to the river we found a large monolith with a primitive picture of a fir tree carved on its surface, probably a boundary stone of the Crusaders (Fig. 1). The mills of Shahoota west of the Tell

FIG. 1

Crusader Boundary Stone? found on the N. Bank of Lake Na'amein. Height ca. 5 ft.

el-Fukkhār are also of Crusader origin and belong to the chain of mills, already described, driven by the waters of the river Belus.

During the Middle Ages a large number of Khāns or caravanserais were built at different points of the caravan

routes which crossed the plain from south and east to the north. Both khāns, the Khān Kurdaneh and Khān Da'ūk, belonged to these chains of " oriental inns," and the large quantity of sheep bones dug out near Khān Kurdaneh bears witness to frugal meals taken by the camel-drivers after a journey's rest. These caravans used to carry goods from Damascus to the busy port of Acre, and wheat from the Jebel Druze to the mills already mentioned. Between Shefa 'Amr and Acre on the Damascus-Acre road there are four khāns :—Khān Suftu 'Ady, Khān Jelāmeh, Khān Kurdaneh, and Khān Da'ūk. On the Nazareth-Acre route :—Khān Mushrefeh, Khān Humeireh, and Kfar Atta. Each khān was provided with a large cistern in which rainwater was stored during the winter. Most of these caravanserais have completely disappeared and only their names are preserved ; others still exist in ruin, but all have lost their significance since the opening of the high road which connected Acre with Haifa and Damascus.[1]

During world war II Tell Kurdaneh served as an observation post. Many officers and men came to visit this interesting spot, although a signboard at the point where the track branches off the Haifa-Acre road warned them with the words " malaria infected area." Hunters arrived with their dogs from time to time for the purpose of shooting water fowl, especially wild ducks, or partridges. Perhaps the loveliness of the landscape with its high palm trees and shady eucalyptus alleys, together with the venerable Crusader mill, proved more attractive to them than the killing of birds of doubtful quality.

[1] See also my article on " The fortified plain of Esdraelon " in the PEQ, January, 1938.

FIG. 1. KURDANEH : THE CRUSADER MILL, LOOKING S.W.

FIG. 2. KURDANEH : THE ROCK ALTAR WITH BLOOD-GROOVE

FIG. 1.
KURDANEH : AIN EL-AFIYEH OF THE SWAMPS, LOOKING N.W.

FIG. 2
KURDANEH : THE NAHR NA'AMEIN, SOUTH OF THE CRUSADER MILL

FIG. 1
KURDANEH: M.B.A. POTTERY FOUND NEAR THE SWAMPS

FIG. 2
TELL AND KHAN DA'UK, LOOKING N.E.

SACRIFICE AMONG THE WEST SEMITES.

By D. M. L. Urie.

Until the discovery of the Ras Shamra texts in 1929 our knowledge of the institution of sacrifice among the West Semites was drawn from a few Phœnician inscriptions and the literature of the Hebrews. This has now been supplemented by the Ugaritian material which reveals the existence of a highly developed sacrificial system in the Syrian city of Ugarit in the middle of the second millennium. The Ugaritian system has many affinities with those of Israel and Phœnicia and it is the purpose of this paper to exhibit these affinities and to attempt to determine the relationship of the three systems. The sacrificial system of the Hebrews which has been the object of much research and which, except for a few points of detail, is not matter of dispute, does not require to be described here. It will be necessary, however, to give an account of the Phœnician system.

The chief sources of our knowledge of Phœnician sacrifice are the ritual tariffs from Marseilles and Carthage (CIS 165, 167).

The chief and most recent treatment of these tariffs is that by Dussaud in his *Les Origines Canaanéennes du Sacrifice Israélite* (1921). Dussaud's method of approach is to note the disposition of the material of the various sacrifices, and to equate those Phœnician and Israelite sacrifices in which the material is similarly disposed. Thus he remarks that in the Phœnician שלם כלל as nothing is given to the priests and worshippers, it must therefore correspond to the Hebrew עולה. By the second method he identifies the Phœnician צועת with the Hebrew זבח שלמים and the Phœnician כלל with the חטאת and the אשם. This method is surely illegitimate. Because in the sacrifice entitled כלל at Marseilles a

small part of the offering was given to the priest and nothing to the worshipper it does not follow that this sacrifice must have been a sin-offering, on the ground that in Israel the material of the sin offering was similarly apportioned. This is clearly a *non sequitur*. Moreover as Prof. Lods has pointed out in his review of Dussaud's work (RHR LXXVI p. 230) Dussaud fails to observe that as shown by line 11 of the Marseilles tariff the שלם כלל was not always a holocaust. This point was previously noticed by Lagrange (*Études sur Les Religions Sémitiques*, pp. 469 ff.) who notwithstanding desired to interpret the שלם כלל as a holocaust. But his explanation of line 11 which gives directions for part of the שלם כלל being retained by the worshippers as " une tournure globale dans ce cas particulier pour éviter des répétitions " is hardly convincing.

Defective also from the point of view of methodology is the treatment of H. L. Ginsberg (A.J.S.L. vol. 47, pp. 52 f.). Arbitrarily identifying the Phœn. כלל with the Heb. כליל and the Phœn. שלם with the Heb. שלם he equates the Phœnician sacrifice כלל with the Heb. עולה and the Phœnician שלם כלל with the Hebrew שלם and finally by a process of elimination concludes that the remaining Phœnician sacrifice, the צועת must correspond to the remaining type of Hebrew sacrifice the אשם and the חטאת. This procedure cannot be defended.

The treatment of the subject by S. Langdon (J.B.L. Vol. XXIII, pp. 79 ff.), though more detailed is also open to criticism. He remarks that in the Carthaginian tariff the material of the כלל is wholly devoted to the deity and his priests, but at lines 2 and 3 as universally restored it is expressly stated that the worshipper's portion of this sacrifice is the תברת (Schröder's explanation of this word as being connected with Heb. בריא " fat " is the most likely—*Die Phœnizische Sprache*, p. 111). His interpretation of the שלם כלל is also highly questionable. Noticing the large number of votive tablets found at Carthage and referring to the

fact that שלם in its intensive stems means "to pay, to requite" he regards the שלם כלל as a votive offering, a pay offering. This reasoning is not convincing. By referring to an Ethiopic root meaning "to call, to invoke" he regards the צועת as a meal offering, *i.e.*, the sacrificial meal to which the worshippers were summoned. This explanation seems rather far-fetched.

This brief criticism of the chief treatments of the Phœnician tariffs brings out certain points to be observed in any examination of them.

It should be noticed that the purely etymological approach cannot be justified. The כלל sacrifice undoubtedly derives its name from the root meaning "all, whole" but this fact does not give us any clue to the significance of the sacrifice. Similarly etymology can afford us no information of the nature and purpose of the שלם, though the derivation of this word is not in doubt. The sacrificial terms may have a long development behind them which is not disclosed merely by referring to the original meaning of the roots.

Nor will the motive and purpose of a particular sacrifice be revealed by noting the way in which the material is disposed of. At most the disposition of the offering gives information only concerning the form of the sacrifice, *e.g.*, whether it is a holocaust or a meal. It sheds no light on the purpose of the rite.

It should be borne in mind also that the Carthaginian and Marseilles tariffs cannot be harmonised. The Marseilles tablet refers to a type of sacrifice not mentioned in the Carthaginian and with regard to those sacrifices which are common to both it should be noticed that the disposition of the material is not the same in each. It must be inferred therefore that there was no uniform sacrificial nomenclature throughout the Phœnician settlements and this conclusion is reinforced by observing that a text from Citium (C I S 86B) refers to a type of sacrifice (שלם) not mentioned in either of the texts we have been discussing. Or perhaps a more

accurate statement would be that on the basis of the texts that have survived it is not possible to reconstruct a uniform system of Phœnician sacrifice.

An examination of the Marseilles text warrants the following conclusions :—

1. Part of the flesh of the כלל in addition to a money payment is always given to the priest, but no part is ever given to the worshippers. The word is undoubtedly derived from the root meaning ' all ", though how this significance is attached to the sacrifice is not clear.

2. The שלם כלל is always accompanied by a money payment to the priests and sometimes part of it is given to the worshippers, but at other times the worshippers do not appear to share in it. No part of the offering is ever given to the priests. שלם is without doubt to be referred to the common Semitic root *šlm* meaning " sound, whole " and in its intensive stem " to repay, to requite " but how these meanings are related to the Phœnician sacrifice it is not possible to say.

3. In connection with the צועת a money payment is given to the priests, and the priests and worshippers always share in the flesh. Of the generally accepted reference of the word to a root appearing in Ethiopic and Samaritan the writer is not qualified to judge.

4. Two other sacrifices referred to are the שצף and the ח ת. The former is translated " s. haruspicinum " by the editors of the Corpus. This however is rather the interpretation to be placed on the חזת probably to be connected with the root appearing in Heb. חזה " to see ". שצף may be compared to Heb. שטף (found once in a nominal form as שצף) and Arab. غسل " to wash, to rinse "., and might be a sacrifice of expiation, though as we have noted etymology by itself is not a sufficient guide.

At Marseilles therefore we venture to suggest that the כלל was a " whole offering " in the sense of an offering wholly devoted to the deity and his priests, and the צועת may

denote the common meal sacrifice. The שלם כלל cannot be brought under any one type. The purposes for which these types of sacrifices were offered are not indicated in the texts and cannot be deduced.

As regards the Carthaginian tablet we may note :—

1. Unlike the usage of Marseilles the flesh offered as a כלל might sometimes be shared by the worshippers.

2. The צועת is always shared by worshipper and priest as at Marseilles.

3. No reference is made to the שלם כלל.

As Langdon has pointed out (op. cit. p. 82) the Carthaginian system is much simpler than that of Marseilles and the two may be related much in the same way as the developed Hebrew ritual to be found in P is to the simpler regulations it displaced, or it may be, as we have suggested, that the Phœnicians had no stereotyped sacrificial system, each city having its own rites and its own terminology.

In addition to the terms already noted the following terms denoting types of sacrifice are found in other inscriptions. Full references are given under each word in Harris—*A Grammar of the Phœnician Language* (1936)

אזר—the votive offering.

מנחת—the offering of meal mixed with oil (Heb. מנחה).

מתנת—the gift sacrifice (Heb. מתנה).

We turn now to Ugarit. The Ugaritian texts make mention of many technical terms of sacrificial ritual, some of them already known from their occurrence in other Semitic dialects, others peculiar to the Ugaritian dialect. Of these terms some are nominal others verbal in form. We give first of all an alphabetical list of the former with an account of what appears to be their significance and their relation to their congeners where these exist.

a k l This root occurs in a non-technical sense meaning simply " to eat, food " (*e.g.*, K 81, 1 D 9). In the two stelæ discovered in 1934 (Syria XVI pp. 155 ff.) it is probably

used in a technical sense meaning " sacrifice ". In the code of Hammurabi we find the word *m a k a l u* meaning " sacrifice " (Furlani—*Il Sacrificio nella Religione dei Semiti di Babilonia e Assiria*, p. 335).

a š m 1929, 27b : 7-9 ; 34 : 11. This root corresponds etymologically to Heb. אשם and is probably a sacrificial term. 1929 : 27 is extremely fragmentary but it contains the words *k d*—" jar " and *p r*—" fruit " which may point to the nature of the *a š m*. 27 b : 8—*a š m n r* " an *a š m* to *n r* " 27 b : 9—*a š m t r t b d* " the *a š m* is spread out " (cf. Heb. רבד). 1929 : 34 is also fragmentary but it would appear to be a list of ceremonies performed in honour of the goddess *š u š k*.

It is clearly impossible to form any conclusion as to the nature of the *a š m* at Ugarit nor do we gain any light on the Biblical אשם. In the old literature of the Old Testament אשם means (*a*) guilt (Gen. xxvi, 10), (*b*) compensation (1 Sam. vi, 3 ff.), (*c*) money given for the support of the priests (2 Kings xii, 16). As denoting a sacrifice it is first found in Ezekiel and P. It is difficult to distinguish in Hebrew ritual between the אשם and the חטאת. Dussaud attempts with indifferent success to treat the חטאת as a sacrifice " pro peccato " and the אשם as a sacrifice " pro delicto " (*Les Origines* etc. pp. 117 ff.). A more probable account of the relation between the two terms is given by S. A. Barton (J.B.L. vol. 46 1927 pp. 79 ff.). The אש- belongs to the period when the idea of sin signified a violation of tabu (cf. Lev. 3). When more ethical ideas of sin came to the front the term חטאת was introduced. The transition from one to the other can be seen in chapters 4 and 5 of Leviticus.

We cannot infer from the existence of the term at Ugarit that there was a sacrifice called אשם among the ancient Hebrews. The ritual of the אשם may have been borrowed by the priestly writers from Canaanite or Babylonian sources. The term does not occur in Phœnician.

u z r II D 1 : 3, 8, 10, 12, 13, 22. Interpreted by Virolleaud as being an epithet of Danel and compared to

Heb. אזור "a waist cloth" and Arab. إزارت. This does not fit the context. It is rightly referred by de Vaux (RB 1937 p. 442) to Phœn. אזרם "votive sacrifices".

d b ḥ The idea of sacrifice is expressed in Ugaritian by the root *d b ḥ* as in Aramaic (דבח,). In Heb. and Phœn. the form is זבח and in Arab. ذبح. The Accad. equivalent *z i b u* occurs rarely and is of late date (Furlani, op. cit. p. 328), the common word for sacrifice in Accad. being *n i q u.* (Furlani, op. cit. p.324). The meaning of the root *d b ḥ* is "to slaughter". In Ugaritian the forms of the root are as follows :

(1) Verbal (*a*) Imp. 1929, 2 : 15, 24, 33 ; K 200 ; IV D1 : 1, 10. (*b*) Imperf. K 76 ; 1 D 191 ; VI A B 4.28. (*c*) Part. K 168. (2) Nominal (*a*) Sing. 1929, 19 : 13 ; SS 26 ; II A B 3 : 18, 19, 20 ; K 66, 71, 163 ; 1 D 185. (*b*) Sing.+2nd sing. suff. K 78 ; sing.+3rd sing. suff. K 120 ; sing+1st plur. suff. 1929, 2 : 15, 24, 32. (*c*) Plur. 1929, 1 : 17 ; II A B 3 : 17.

(3) *m d b ḥ* "altar" 1929, 3 : 41.

(4) *m d b ḥ t* nominal form equivalent to *d b ḥ* (2) 1929, 1 : 20 ; 3 : 24, 38 ; 6 : 16.

d g š This word occurs only in the Danel poem—1 D 185, 186, 192, 193.

y š ' l y d g š t "He causes the *d g š t* to ascend", *i.e.*, he offers the *d g š t.*

š ' l y d g š l š m y m d g š h r n m y d k b k b m l t b r k n "offer the *d g š* to the skies the *h r n m y* of the stars that you may bless me". The context would seem to indicate that it was a nocturnal sacrifice. Virolleaud connects with the root with Arab. دغش "darkness". In line 189 reference is made to *m ṣ l t m* and *m r q d m* (cymbals, dancers—מצלתים, רקד) which show that the sacrifice was accompanied by dancing and music.

k b d In the ritual texts published in 1929 this root occurs four times in a cultic sense. 1929, 1 : 2 *m t n t m n k b d* " a perfect gift is offered ".
1929, 3 : 39 *k b d w d b ḥ* " an offering and a sacrifice ".

The root occurs also at 5 : 3 and 9 : 13. In each case the context, though doubtful, is clearly sacrificial. In the Sabaean inscriptions we find *k b d t* meaning " sacrificial gift ", the precise equivalent of Ugaritian *k b d* (Gaster, P.E.F.Q.S., 1934 p. 141).

m t n 1929, 1 : 2 ; VI A B 5 : 12, 14, 25. This term corresponds to Heb. מתי and מתנה which, besides meaning " gift " in general, are used particularly of sacrificial gifts. cf. Phœn. מתן and מתנה both used of sacrificial gifts. At 1929, 1 : 2 the *m t n t m* is referred to—"the gift without blemish ". *t m* is Heb. תם applied to unblemished sacrificial victims.

n q t m 1929, 1 : 18. This term is probably to be referred to Accad. *n i q u* the common term for sacrifice. The root has not retained this significance in Heb., Phœn., Arab., or Aram., but cf. Syriac ܢܩܦ " to make a libation ".

ʿ d b This root occurs frequently in Ugaritian and means " to prepare, to set ", cf. Heb. עזב II. In its verbal form it has a cultic significance only once—1929, 48 : II—*w k s p ʿ d b* " and silver he offers ". The noun *ʿ d b* is however clearly a cultic term. Its occurrences are SS 54 ; K 234 ; III D 1:22. The meaning is probably " sacrifice ".

m ḥ r m Occurs in the stela to Dagan (B line 3) published in Syria XVI p. 155.

p g r d ś ʾ l y
ʾ z n l d g n b ʾ l h
ś w a l p b m ḥ r m

p g r must mean " altar " or " stela "
m ḥ r m is to be referred to Accad. *m a ḥ r a* —" to meet, to receive " and Sabaean *m ḥ r* " token of favour " " gift ".

Translate thus :—" The altar that ' *z n* has set up for Dagan his lord (an altar) for a sacrifice of a sheep and an ox." (For a discussion of the stelæ, see Obermann, J.A.O.S. Vol. 61, 1941, p.31).

ṣ' II A B, 1 : 42. May be the Phœn. צוּעת. Besides its appearance on the Marseilles tariff the word also appears on a third inscription from Larnax tes Lapethou circ. 345-315 B.C. published in 1938 (A. M. Honeyman, Le Muséon LI pp. 285 ff.). The Ugaritian context gives no indication of what sort of sacrifice it was.

ś l m This is the common Semitic root meaning fundamentally " to be at peace ". The occurrences of the root at Ugarit may be classified as follows :—

(1) Meaning simply " peace " S S 7, 26; V A B, B. 32.

(2) As a term of greeting. 1929, 18:4,5; 21:4; 52:4.

(3) As a ritual term denoting a type of sacrifice. 1929, 1:4; 3:52; 5-7; 9:7,15; 51:8. V A B, C 13, D 53, 68, 74; VI A B 2:20; K 130, 131, 274, 275. With this significance the root occurs in the singular and the plural and corresponds etymologically to Heb. שֶׁלֶם and Phœn. שלם. The term probably appears in Accad. as *s u l l a m u* (Furlani, op. cit. p.185).

1929, 1:4—*ś r p w ś l m n d q t m* " small animals for the *ś r p* and the *ś l m m*."

1929, 3:52—fragmentary.

1929, 5:7 *ṣ e n ś l m m* " a sheep for the *ś l m m*".

1929, 9:7 — *d q t ś r p w ś l m m* " a small beast for the *ś r p* and the *ś l m m*".

1929, 9:15 — fragmentary.

1929, 51:8 — *ś l m e l* " The *ś l m* of El" V A B, C 13, D 53, 68, 74; VI A B, 2:20.

s k ś l m m l k b d a r ṣ " Pour the *ś l m m* into the heart of the earth."

K 130, 274, 275 *q ḥ K r t ś l m m* "Take O Keret the *ś l m m*".

The following points may be noticed in connection with the use of the term at Ugarit.

(1) It was sometimes a liquid sacrifice cf. V A B. c 13.

(2) It was sometimes an animal sacrifice cf. 1929, 1:4; 5:7; 9:7.

(3) It was sometimes an inanimate offering cf. K 130—141.

(4) The *ś l m m* described at V A B, C 13 was part of a fertility rite. Aleyan Baal informs Anat that as a result of the sacrifice, *ḥ s k ' ṣ k ' b ṣ k ' m y* " Your orchard (Arab غَسَّ) your wood (Heb. עץ) your corn (Arab. غَبَّا) will be with me ", *i.e.*, I will cause your vegetation to flourish, a promise in keeping with the character of Aleyan as a god of vegetation.

(5) The *ś l m* was poured into the earth (V A B, C 13) therefore it cannot have been a communion meal.

(6) K 130. In this passage it is clear that the *ś l m* was offered to Keret to ward off his vengeance.

The Hebrew זבח שלמים was a sacrifice in which part of the material was given to the god and the remainder was reserved by the worshippers to form the basis of a meal. It was offered for many purposes—to commemorate victories (Joshua viii, 31), on the occasion of a defeat (Judges xx, 26), at the consecration of kings (1 Sam. xi, 15), on the establishment of peace (2 Sam. vi, 17), on the cessation of a plague (2 Sam. xxiv, 25), on the dedication of the temple (1 Kings viii : 63). The sacrificial material might consist of oxen, rams, or goats (Lev. ix, 18) or of unleavened cakes mingled with oil (Lev. vii, 12). The fat of the victim was burned (Lev. vii, 22) but the flesh was eaten and had to be consumed at the latest by the second day (Lev. vii, 15). Any part of the flesh remaining to the third day had to be burned (Lev. vii, 16,17).

The original significance of the שלם has been matter of dispute. In the LXX it is rendered by *σωτήρια, θυσίαι τοῦ σωτήριου, θυσίαι εἰρηνικαί* or *τῶν εἰρηνικῶν.* So

also Aquila, Symmachus and Theodotion. The Vulgate renders "victima pacifica", "pacificum". (sc. sacrificium). In these versions it is obviously connected with the simple stem of שלם.

The Ugaritian evidence adds little to the discussion. It may however be suggested that the evidence, such as it is, would associate the sacrificial term with the fundamental meaning of the root. In the two narrative instances we have seen that the *ś l m* was offered respectively to induce Aleyan Baal to grant fertility and to ward off the vengeance of an enemy. The idea of peace may underlie both of these sacrifices. Fertility will be granted by Aleyan when a state of peace exists between him and his worshippers. To render him peaceably and favourably inclined a sacrifice is offered. To avert the vengeance of an enemy a peaceful relationship must be established between the opponents. May we go a step further and say that to obtain peace between the worshipper and the deity, the deity must be propitiated : that as the *ś l m* was offered to Keret to propitiate him so the *ś l m* was offered to Aleyan as a means of propitiation? The idea that the spirit of vegetation must be propitiated before fertility is granted is common among primitive peoples.

In the Ugaritian narrative texts therefore each example of the *ś l m* can be embraced under the idea of propitiation. (The ritual texts give no clue to the nature of the sacrifice). The conclusion would appear to be that at Ugarit the *ś l m* was the sacrifice of propitiation.

ś r p 1929, 1 : 4 ; 9 : 7 ; Syria XIV p. 231 line 16. In the first two instances adduced *ś r p* is parallel to *ś l m m* and must therefore denote a form of sacrifice. The root is undoubtedly that of Heb. שרף and the sacrifice denoted is probably the holocaust. This meaning attaches to the Accad. *šurpu* (Furlani op. cit. p. 335). The root occurs in Heb. in a ritual context in various instances of which we may note Deut. xiii, 17 where the object of שרף is כליל :

Num. xix, 15 where שרף is used of burning the red heifer : 2 Chron. xvi, 4, a funeral ritual. All that can be ascertained of the Ugaritian *ś r p* is (1) it seems to have been accompanied by a *ś l m* (2) *d q t m* (small animals) were sometimes offered.

š ' y 1929, 1 : 11 ; 2 : 16, 24, 32, 33, I A B 6 : 56 ; II A B 8 : 48.

1929, 2 : 16 *d b ḥ n n d b ḥ h w š ' n š ' y*—" Our sacrifices, we sacrifice, behold our offering we offer." Parallel to *d b ḥ* and *n d b ḥ* and therefore clearly a sacrificial term.

I A B 6 : 53-57. These lines are the colophon of the scribe and *ś ' y* is parallel to *š p r l m d* and *r b k h n m*. *ś p r* is clearly " scribe ", *l m d* is probably " pupil " and *r b k h n m* is "chief of the priests ". *š ' y* must therefore denote a cult official. The word is compared by Montgomery and Harris to a South Arabic root. (*Memoirs of the American Philosophical Society* IV 1935 p. 129).

Information as to the sacrificial system at Ugarit is derived also from the following verbs which occur in a sacrificial context.

d r q II A B 2 : 15 ; V A B D 83 ; II D 5 : 11. Corresponds to Heb. זרק in its cultic meaning " to bespatter ", i.e. to bespatter the altar with the blood of the victim.

y ṣ q. This root is almost identical in usage with Heb. יצק It means (1) " to pour ", in a general sense, e.g. I A B 6 : 14 ; I Kings xviii, 34. (2) " to cast, to fuse " of metals, e.g. II A B 1 : 26 ; I Kings vii, 23. (3) " to pour " of liquids offered in sacrifice. V A B B 31 ; K 71.

n d r II D 6 : 20, 21, 22, 23. Occurs in a sacrificial context and clearly means " to offer ". cf. Heb. and Phœn. נדר " to vow ".

n w p 1929, 1 : 10. *ś n p t* " a lamb presented as a wave-offering ".

1929, 3 : 13 *ś p ś n p* "an ornament presented as a wave offering". For *ś p ś* cf. Heb. שביס and Arab. شَمْس "a collar". The Ugaritian term is parallel to Heb. תנופה a technical term occurring in P to denote those offerings part of which was retained by the priests, the retention of a portion by the priest being symbolised by waving the offering towards the altar and back in token of its presentation to the deity and return by him to his priest. (For a recent discussion of the תנופה and the תרומה see A. Vincent in Dussaud, *Mélanges Syriens*, pp. 366 ff.).

n s k. This root means "to pour" and is used in a general sense, *e.g.* at V A B, B 40, 41. At V A B, C 13, D 53, 68, 73 (parallel passages) it is used in a ritual sense meaning "to pour a libation". cf. Heb. נסך "drink-offering". The root has no ritual significance in Phœn.

' l y This verb is used several times in Ugaritian, meaning "to go up". At I D 185, 192 it clearly has a cultic significance. *y ś ' l y d g š t b š m y m*—"He causes the *d g š t* to ascend to the skies", *i.e.*, he offers the *d g š t.* In Heb. the Hiph 'il of עלה is frequently used in a similar sense. In the Ugaritian passage quoted the verb is used with respect of that which goes up to the sky in smoke, not that which goes up on to the altar. This may have been the original meaning of the Heb.

r m m I A B 6 : 43 *l ḥ m t r m m t l t ś t y n* "Bread thou shalt offer, wine thou shalt drink". cf. Heb. רום used in the Hiph'il to signify the offering of sacrificial gifts and תרומה a ritual term denoting the waving of certain gifts before the altar.

In his *Ugaritic Grammar* C. H. Gordon gives a sacrificial significance to the two following words :—

g m n I AB 1 : 19-29. Gordon refers to Heb. גמול

m l k t 1929, 41 : 4. He translates "מַלְכָּה sacrifice" but the context is uncertain, and the word may be a form of the verb *m l k* or may mean "queen".

The system revealed by these terms has many apparent affinities to those of Israel and Phœnicia, but there are also not a few differences. Common to Ugarit and Phœnicia are the terms *ś l m* ' *ṣ* ' ' *n d r* ' *m t n* ' *u z r*. Of these the last three are identical in usage while the nature of the *ṣ* ' is not clear in either system. We have seen reasons for believing that the *ś l m* at Ugarit was fundamentally a propitiatory sacrifice, but the character of the *ś l m* in Phœnicia is not clear. Common to Israel and Ugarit are *a š m*, *d r q*, *m n*, *m t n*, *n d r*, *ś l m*, *ś r p*, *n w p*, *n s k*, ' *l y*, *r m m*. Apart from the *a š m* whose significance at Ugarit is not known, and the *ś l m*, the use of these terms would appear to be identical. Peculiar to Ugarit, occurring neither in Heb. or Phœn., are ' *a k l* ' *k b d* ' *n q t m* ' ' *d b* ' *š* ' *y*. Of these *a k l* and *n q t m* occur in Accad. Common to Heb. and Phœn. but not occurring in Ugaritian are מנחה and בליל.

From the point of view of ritual also the resemblance between the three sacrificial systems is marked. Each is familiar with the different methods of dedicating the sacred gifts at the altar as are implied in the libation, the burnt-offering, the sacrificial meal, the wave-offering, the ritual manipulation of the blood.

It is clear that the sacrificial systems of Phœnicia, Israel and Ugarit are closely related. How is this relation to be accounted for ?

It is being increasingly realized that the source of Semitic culture and religion is to be sought in Mesopotamia. It is clear beyond doubt that the cultures of the various Semitic peoples conform to a single pattern, are developments of a single prototype. Their relation to each other is well brought out by the authors of *Myth and Ritual* who trace throughout the several Semitic cultures dominant ideas that find their earliest expression in the cuneiform texts of Babylon. It can no longer be maintained that the desert Arabs have preserved the remains of a pure Semitic ritual and mythology. Historically the agricultural stage " preceded the nomadic ".

"Arabic religion is not that primitive congeries of nomadic beliefs and practices which the towns outlived and adapted and modified and developed : but it is the result of attrition : a shedding of all complications of ritual and pantheon . . primitive Semitic nomadism is an abstract concept which corresponds to nothing in reality." (Guillaume, *Prophecy and Divination*, pp. 73 and 74).

It follows therefore that the sacrificial system of the West Semites derives from Babylon. The sacrificial ritual and terminology of Israel, Ugarit and Phœnicia have a common ancestor and on this ground we are to explain the many similarities that are to be discerned between the four systems. The Babylonian is the parent system and the West Semitic systems are descendants, direct or indirect, which have developed in some respects independently and in others by means of borrowing.

Granting then the fact of a common ancestor, how are we to explain the affinities that exist between the three West Semitic systems ?

There is but one possible answer. The Ugaritian texts date from the middle of the second millennium at which period the clans that later formed the Israelite nation were still nomads. Such sacrificial ritual as they possessed must have been much simpler than that of Ugarit. The Hebrew system must therefore have been borrowed after their entry into Palestine from a Canaanite original which was either that of Ugarit or one closely allied to it. From Ugarit or from a related system was also derived the later Phœnician system.

This theory of borrowing was put forward by Dussaud in his *Les Origines Canaanéennes*, etc., to explain the similarities between the Levitical system and those of Marseilles and Carthage. Both the Phœnician and the Israelite systems he maintained were borrowed from the Canaanites (p. 154). The period of borrowing he believed to be long anterior to the Exile and must be identified with the period of settlement

in Canaan when the nomads took over the Canaanite agricultural system. In *Les Découvertes de Ras Shamra et L'Ancien Testament* however, in comparing the Ugaritian systems of sacrifice he has withdrawn from this position and maintains that both systems are derived independently from a common ancestor which must have been the sacrificial system of the nomads. To this theory there are serious objections. It is not to the desert, as we have seen, that we are to look for the origin of Semitic institutions but to Mesopotamia. Nor is it at all probable that two peoples should develop systems which correspond so closely to each other in every respect.

The intimate connection between the sacrificial systems of Israel, Phœnicia and Ugarit is therefore to be explained as the result of borrowing by Israel and Phœnicia from Ugarit. From this point of view the importance of the Ugaritian literature lies in the fact that if not itself the medium, it represents the medium by which Babylonian ritual and mythology were propagated in Syria and Palestine.

REVIEWS AND NOTICES

Ferris J. Stephens. *Old Assyrian Letters and Business Documents.* (Babylonian Inscriptions in the Collection of J. B. Nies, Yale University, vol. VI). New Haven. Humphrey Milford.

This volume contains copies of 270 tablets or fragments, and 5 plates illustrating seal impressions and some of the documents. This concludes the publication of the tablets from Kul Tepe in Cappadocia in the Nies Collection commenced by the late A. T. Clay, and contains, like all such publications, a tantalising amount of information concerning very early social and economic conditions about 1900 B.C., concealed by innumerable difficulties in interpretation. These tablets, earlier in date than Hammurabi, a point misrepresented in some of the standard reference books, though they are so generally called " Old Assyrian," differ so much in script and language from that actually used in the correspondence of Shamshi-Adad I and his sons found at Ma'eri, that it is really time some better justification for that term than has ever been given should accompany any further use of it. The script derived from that of the Third Dynasty of Ur, is quite independent of the Babylonian development used at Ma'eri and apparently at the city of Ashur. The language is not the Akkadian of the Amorite dynasties, is akin to, but not identical with, Middle Assyrian, and may be a direct successor of some earlier branch than the language of the dynasty of Agade. It would be a good thing if one of the competent scholars at Yale would consider this question and put us all in his debt.

The documents are difficult to understand simply because we do not understand exactly how trade worked in pre-currency days : the meaning of the words constantly escapes

us because, though we can recognise the roots, that is not enough. Sometimes we can see what is meant quite clearly. Thus one correspondent writes to his " father," that is either his real father or his business chief (no. 15) : " I have written, *labtāku*, the tithes of the company, *ellat*, of N.N. (an associate of correspondent and addressee) at the house of the market-quay. You are my ' father.' When your ear does the accounts, then apply to your hand and then send the amount received in silver. You are my ' father.' Pay attention and then it shall not be lost to me. Now I hear your word." Obviously the merchants' trading house was corporately responsible for the payment of tithes by individual merchants. The correspondent had underwritten with that corporate body the unpaid tithes of a caravan of some trader belonging to his immediate circle. In order to recover the amount thus due in town A, he writes to the head of the firm, presumably at Kul Tepe, asking that steps shall be taken to that end. It is a matter of accounting. The " ear " is the assistant who keeps accounts by memory, as is commonly done even still. The " father " of the correspondent and N.N., whose obligation for tithes has been underwritten, clearly had a running account. The amount is to be transferred from N.N.'s credit, or else debited against him. Then the amount is to be returned to town A in cash. " To apply to your hand " is, then, to credit one's account.

That is an example of accounts kept by memory. But there were audited accounts too, that is tablets examined and passed correct by expert scribes. One woman—women are surprisingly prominent in these documents—writes to another : " As (lit., if) you are my sister, as you are my mistress, you and I, we have done one another mutual kindnesses (*nirtiḫam*, *-t-* form, mutual action). Let your instruction come as to all the gear you have entrusted to Bushukin and so open my ear. You gave me the tablet of the accountant, *ummeana* and . . . . do thou entrust to a trustworthy assistant accountant. I will fetch it wherever you put it in trust, I will bring it with your consignment. When you send me that tablet, I will rise and come back, I will come back

to you. Don't give the two containers which are in a hidden place to N.N. If Bushukin asks for them, give them. If he does not, don't give them to any one till you see me (lit., my eye)." The lady secretary is engaged in clearing up her mistress's affairs, which involves consulting not only her mistress's memory but also written records properly drawn up. These documents are an excellent field for research into the conduct of business on a pre-currency system, a mixture of credit and cash which is always passed over in our histories.

SIDNEY SMITH.

The Committee acknowledges with thanks the following :

Modern Science Review. Vol. VIII, 8. August, 1948.
Expository Times. Vol. LX, 1, Vol. LX, 3, Vol. LX, 4, Vol. LX, 5, Vol. LX, 6.
Journal of the American Oriental Society. Vol. LXVIII, 3. July/September, 1948. Supplement July/September, 1948. Vol. LXVIII, 4. October/December, 1948.
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Sumer. Vol. IV, II.
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Scripture. Vol. III, 4, Vol. IV, 1.
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PRINTED BY HARRISON AND SONS, LTD., ST. MARTIN'S LANE, LONDON

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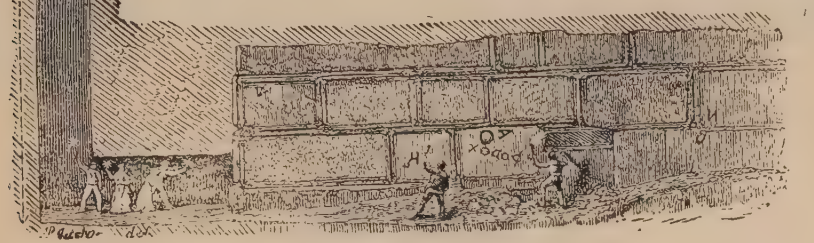

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THE PALESTINE EXPLORATION FUND

NOTES AND NEWS

THE focus of interest during the past months has been the slightly sensational story of the discovery of a number of biblical scrolls by a goatherd in a cave near the Dead Sea. The discovery appears to have been made as far back as 1947, but a considerable time elapsed before the scrolls came into the hands of anyone capable of appreciating their importance, and the discussion of their date and significance is still in its opening stages. In this issue Mr. Lankester Harding gives an account of his own excavation of the cave after the plunderers had removed everything but broken fragments.

At present the pendulum is swinging between the extremes of credence and incredulity. In the April number of the *Jewish Quarterly Review*, Professor Solomon Zeitlin discusses the documents in an article entitled *Scholarship and the Hoax of the Recent Discoveries*, a title which sufficiently indicates the learned scholar's attitude towards the discoveries. The American scholars who were fortunate enough to get in " on the ground floor," as the saying is, with the enthusiasm of discoverers place the date of most of the documents at least as early as the second century B.C., in which opinion they have the weighty support of the Achilles of American archæology, Professor Albright. During the summer months of this year the columns of *The Times* have served as the arena of a pretty gladiatorial combat in which the *retiarius* with his net and trident, in the person of Professor Godfrey

Driver, seeks to entangle the helmed *mirmillo*, in the person of Mr. Leveen of the British Museum, and to puncture the bubble of a pre-Christian date for the scrolls. Dr. Birnbaum also has entered the fray and from the expert epigraphist's point of view has pronounced in favour of the early date, as readers of this issue will see.

One remembers that when the Elephantine Papyri were discovered, the late Professor Margoliouth denounced them as a clumsy forgery ; and when the Ras Shamra tablets were first brought to the notice of a certain learned society, two learned and eminent scholars shook their grey heads and murmured " forgery." So it is not surprising that a certain amount of scepticism should greet the appearance, under such strange circumstances, of the new documents.

In the same issue of the *Jewish Quarterly Review* as that which contains the article by Professor Zeitlin referred to above, there appears an article by Professor H. Torczyner (who now styles himself Tur-Sinai) on Lachish Letter IV, purporting to give new light on the Lachish ostraca. The point of the article turns on the use of the Hebrew work *'oth*. Professor Torczyner now maintains that this word, which is of frequent occurrence in the Old Testament, and which also occurs in Ostracon IV, never has the meaning of " a sign proper, a token expressing the will or meaning of man or God," but only denotes a miracle or event of miraculous character. From this he goes on to argue that Ostracon IV was actually written to the prophet who is mentioned in several of the other Ostraca, and adds the following statement : " That this, the main clue to the understanding of the whole correspondence from Tell ed-Duweir, was not recognized, neither by myself nor by any other scholar, was due only to the traditional misconception of the single Hebrew word *'oth*." Professor Torczyner goes on to argue that Ostracon IV, so far from referring to military signals from Lachish, given by the commander of its garrison, is a message declaring the faith

of the writer and his comrades in the prophet who has given so many *'othoth* or miraculous proofs of his divine mission. Whether the limited interpretation of the word *'oth* upon which Professor Torczyner's theory rests is tenable, remains to be seen.

In its April issue the *Journal of Near Eastern Studies* has an article by Dr. J. Gray, the author of the article on the Rephaim in the current number of this journal, on *The Desert God 'Attr in the Literature and Religion of Canaan.* It contains much new and suggestive material linking up an earlier nomad stratum of religion at Ras Shamra with traces of the cult of 'Attar-Kemosh-Milcom at Jerusalem. The article is of great interest, both from the point of Palestinian archæology, and from that of the history of the early religion of Canaan and of Israel. It is reassuring to know that the Ras Shamra texts, which are being so assiduously and fruitfully studied in the U.S.A. and in Scandinavia, are not being neglected in this country.

In the April issue of the *BASOR* there are several short studies on the newly discovered documents. One entitled *Further Light on Habakkuk*, by W. H. Brownlee, and one on *The "House of Absalom" in the Habakkuk Scroll*, by D. N. Freedman. Until the promised publication of the new material it is impossible to form any estimate of the value of such studies.

It may not be generally known that Professor M. E. L. Mallowan, professor of Western Asiatic Archæology in the University of London, has undertaken to edit a series of Pelican volumes dealing with various aspects of archæological studies. The first of these appeared in April of this year under the title *The Archæology of Palestine*, by Professor W. F. Albright. This volume will give the reader the latest results in the field of Palestinian and Biblical archæology, and the author's name is a sufficient guarantee of the value of the book. It will be reviewed in a later issue of this journal. It has already had a very large sale.

Any communication from the pen of Professor Dussaud is always welcome, and in *Syria*, XXV, 3–4, he contributes an important article entitled *Melqart*, which disposes summarily of a number of earlier erroneous identifications, and traces the connection between Melqart (god of the city) and Hadad or Baal, together with the later connection with Tyre and Heracles. It is an article of great interest and value, full of ripe scholarship.

In the issue of the *American Journal of Archæology* for Jan.-March, 1949, Professor Kramer continues his studies of the Epic of Gilgamesh and its sources with the publication of a new Sumerian poem to which he gives the title *Gilgamesh and Agga*. The poem is evidently still full of difficulties, but Professor Kramer is of the opinion that the text is of considerable historical importance since it provides a number of hitherto unknown facts concerning the early struggle between the cities of Kish and Erech. In addition, it contains, as Professor Thorkild pointed out earlier, an account of what are probably the two oldest political assemblies yet known to man.

R. P. R. de Vaux, in the January number of the *Revue Biblique*, continues his valuable series of articles on the light thrown by modern archæological discoveries on the period of the Hebrew patriarchs. It is much to be hoped that when the series is completed the articles will be published in book form.

Lieut.-Colonel H. E. M. Newman has contributed to the March and June numbers of *The Royal Engineers' Journal* an exceedingly interesting account of the Ordnance Survey in the Near East. It records the activities and achievements of two expeditions, one in 1864–5 which carried out the survey of Jerusalem, and the other in 1868–9 which surveyed Sinai. The P.E.F. played an important part in both expeditions, and the story is a valuable piece of the early history of the Fund's activities.

In response to a number of requests, the Committee of the Fund are hoping to prepare in the near future several film strips for hire by those who require illustrations for lectures on the history of Palestine. The first, which is now in preparation and will be available shortly, will be one on the archæological background in Palestine of the Bible study course as drawn up in the Agreed Syllabus for schools, and it will be accompanied by an explanatory script.

At the time of going to press, and too late for an obituary notice, the news has reached us of the death of Professor Stanley A. Cook, the veteran Old Testament scholar, and for thirty years editor of The Quarterly Statement of the Palestine Exploration Fund. He was a scholar of immense erudition and untiring industry, and his literary output is enormous. His was a mind of considerable originality and subtlety, and in his case fecundity of thought sometimes prevented clarity of expression, but everything he wrote was worthy of serious consideration. A deep and sincere kindliness, humanity, and simplicity, were the distinguishing marks of his character, together with profound religious convictions. His passing removes one of the ancient landmarks in the field of Old Testament and Semitic scholarship. An obituary memoir will appear in our next issue.

SOME CANAANITE SCARABS

By M. A. Murray

(My thanks are due to the Director of the Institute of Archæology, University of London, for permission to publish the scarabs in the Museum of the Institute ; to Lady Petrie for permission to publish several scarabs from Tell Ajjul, of which the drawings will appear in the forthcoming volume (*Ancient Gaza*, vol. V) of the British School of Archæology in Egypt ; and to the Director of the Fitzwilliam Museum, Cambridge, for permission to publish some of the scarabs in the Gayer-Anderson Collection.)

The discovery of scarabs in any quantity in Palestine is so recent that there has been little time for a detailed study of the subject. Petrie's remark (*Anc. Gaza* I, p. 3) that " all so-called Hyksos scarabs are of Canaanite work, made before and during Hyksos rule," is undoubtedly true. There is also the unexpected fact that certain types of Canaanite scarabs are the prototypes of some of the well-known motifs of Egyptian scarabs.

The Canaanite scarabs at their best are as fine as, if not finer than, the Egyptian. The beautiful material is steatite glazed with so hard a glaze that it looks and feels like the finest porcelain. The cutting of the figures and hieroglyphs is equal to the best of the Egyptian scarabs except perhaps some of the fine examples of the Middle Kingdom. The numbers of scarabs found in southern Palestine so far exceeds the number found on any one site in Egypt that it becomes a question whether the scarab may not be actually a sacred Canaanite product introduced into Egypt. At Tell Ajjul, Tell Duweir, Tell Fara, Gezer, and other smaller places, the scarabs found can be counted by hundreds. In one season's work at Tell Ajjul the number of scarabs found

exceeded five hundred, not counting the broken or completely defaced examples, of which there were as many. A great number of the scarabs are found loose in the soil on every site, though the greater number come from tombs. But owing to the Palestinian custom of family vaults, which appear to have remained in use for centuries, the dating of such scarabs is therefore often impossible except by dated Egyptian examples. I take here two types of scarabs. In the first I trace the changes from the purely Canaanite to a well-known Egyptian motif ; in the second I suggest the reading of certain inscribed scarabs.

Plates IX–XI. The early examples show a human figure holding either a lotus or a palm-branch. The figure, including the legs and arms, is in outline ; the dress is elaborate, and often appears to have been a piece of cloth wrapped round and round the body, as is seen in New Kingdom pictures of Syrians. The figures are represented striding (IX. 1–9), standing (X. 1–13), with bent knees (X. 14), kneeling (X. 15–19 ; X. 1–3, 5) and enthroned (XI. 4). Whatever the attitude, the figure holds or is accompanied by a lotus or palm-branch. There are, however, a few exceptions to the general rule. In the later scarabs, the figure though entirely human has one arm raised but holds nothing, while the space usually occupied by the lotus-stalk or the palm-branch is filled with hieroglyphs (X. 9, 11). The kneeling figure (XI. 5) holds two flowers, but this is rare. Again coming slightly later in the series, the figure, instead of being entirely human, has an animal's head (X. 12, 18) ; both these, it should be noted, are female. The lotus is conventionally shown with a stiff stalk, but in some examples (X. 1, 13) the stalk has a very slight bend where the hand grasps it ; the bend is greatly exaggerated in the late example (XI. 2).

It is as yet uncertain when the change from the Canaanite to the Egyptian form first began, probably a century or more before the Hyksos entered Egypt. At first the scarabs are of steatite, but when the design becomes entirely Egyptian the material is faience and has been cast in a

mould, while the whole design shows a marked degeneration. This suggests that the Egyptian examples were copies of the Canaanite.

The first change appears to be the introduction of the cobra into the design. The figure still holds the lotus (XI. 6, 12 ; IX. 2, 5, 11, 13, 14), or the palm (IX. 16 ; IX. 3) ; the snake appears to be entirely independent, and is without any relation to the figure. The next stage shows the figure holding the cobra by the tail, the snake rearing up from the hand, and facing with spread hood towards the figure. The tail may be stiffly straight or may have the slight bend seen in a few instances in the lotus stalk (XI. 8, 11). Occasionally the snake's tail is fringed (IX. 7, 10). The curve and fringing of the tail show that the snake-form is derived from the lotus and palm of the earlier design. When two cobras are represented, one is usually held by the figure, while the other appears to issue from his garment ; or they may be symmetrically arranged, one on each side facing towards the figure.

With the change in the design there comes also a change in the style. Though still keeping the attitudes of the Canaanite prototype—striding, standing, kneeling—the head is no longer human but is changed to the head of the falcon. Another change takes place in the drawing of the figure, for the arms and legs are now represented by a single line, whereas in the early Canaanite scarabs the limbs are indicated in true outline, *i.e.*, with a line on each side. The beginning of the change is seen when one arm is represented by a single line while the other arm and the legs are in outline (X. 5, 7, 14, 18 ; XI. 1, 2). When the cobra, the falcon-head and the single-line limbs are fully established, the design reaches the familiar type of Horus or Rê holding and accompanied by cobras, a type most frequently found in the New Kingdom (IX. 7, 9).

The design of the scarab shown on IX. 16 is unique. It represents a kneeling female figure in an elaborate dress (for the necklace compare X. 18) ; the head is possibly that of the vulture. The figure holds a creature compounded of

a cobra and a crocodile, with a curve of the body reminiscent of the curve of the lotus stem. This may perhaps show the origin of the design of falcon-headed figures holding or accompanied by a crocodile, which is not uncommon in the New Kingdom.

Here I venture to make a few suggestions as to the meaning of the design. Judging by the change of the head from the human to the falcon it would seem that in both cases the figure represents a deity, probably the Canaanite equivalent of Horus or Rê (IX. 8, 9) ; possibly therefore the sun-god, later called Shems by the Israelites. The significance of the lotus, the palm, and the cobra in Palestine is unknown. The snake may, however, have some connection with the serpent worship in the temple of Jerusalem, which legend derived from the cure of snake-bite during the wanderings in Sinai. The palm branches strewn before the Divine Victim suggest that they also had a sacred or ritual significance. In Egypt the lotus-god of Memphis, Nefertum, was of great importance in the Old Kingdom, though less known later ; but there is, as far as I know, no sanctity attached to the lotus in Palestine, nor to the palm in Egypt. The cobra, however, has a peculiar sanctity in Egypt, being the emblem of all goddesses, and was as the godden Wazt the special protection of the Pharaoh.

Plate XII. The inscribed scarabs of the Hyksos period are usually dismissed with the contemptuous epithet of "nonsense hieroglyphs," yet many of these scarabs are among the finest in workmanship and material ; and they are often set in gold as the bezels of rings. It is not possible that so much skill and consequent cost would have been spent on ignorant copies of misunderstood inscriptions ; those inscriptions must have been regarded as important and have conveyed some meaning to the wearers.

In comparing the inscriptions, it becomes clear that they are variants of one sentence, which in its original form was simple and concise ; though in the later examples it becomes confused, perhaps purposely so. The main difficulty in reading the sentence is the use of the sign which is given

as No. 36 D in "Gardiner's Egyptian Grammer." Yet it is well known that this sign has two readings, the uniliteral *ayin* and the biliteral *dì*, and that both usages can be found in many an inscription at all periods of the language. Bearing this in mind, it will be seen that the inscriptions on scarabs XII. 1–9 can read *dì-n rn R'*, "The name of Rê is given." Nos. 10–15 give a shortened form, *rdi-n R'* "Rê has given" or "The gift of Rê." This is reduced, with the same meaning, to *dì-n R* in Nos. 16–20.

The last four numbers on the plate give other variants. No. 21 being circular can read from either end *rn dì* "The name is given". No. 22 has an inscription in three registers; in the centre is the word *rn* repeated three times, a well-known form of writing the plural, and therefore reading *rnw* "Names." As this is certainly a ring-scarab the side registers are clearly intended to be read from either end, *s' rn* "Protection of the name," the central N being used for the completion of the word *rn* whether read from right to left or left to right. No. 23 is a less elaborate and less well made form of No. 22. The central register gives the plural *rnw* "Names," the left-hand register reads from the middle in both directions *dì-n s'* "Protection is given." No. 24 has in the central register, *dì rnw* "The names are given." The superfluous *n* below shows perhaps that the inscription is slightly confused. The same confusion is seen in the side registers, which presumably should read *s' nfr* "Good protection."

I suggest then that the inscriptions on the scarabs of this type were for the magical protection of the name. From the beauty of the workmanship and material, and from the fact that royal emblems (Nos. 10, 19, 20) are often introduced, it seems probable that originally these scarabs were intended to commemorate the solemn ceremony of the giving of the Rê-name to the king, and to protect that name when given. Among all primitive peoples the giving of a name is an important event in the life of every individual, the name itself being regarded as an integral part of the personality and as requiring protection from witchcraft and other evils.

The magical twisted rope of Nos. 1 and 3 shows this idea of protection as clearly as the actual word s' of Nos. 22 and 23.

Though such scarabs were originally for the protection of the royal name, time brought changes, and the formula seems to have been used among the later Hyksos for the protection of the names of the owner of the scarab, no matter what his rank.

References

A.A.A. Liverpool Annals of Archæology and Anthropology.
A.G. Petrie. Ancient Gaza. (Tell Ajjul.)
B.P. Petrie. Beth Pelet. (Tell Fara.)
G.-A. Coll. Gayer-Anderson Collection. Fitzwilliam Museum. Cambridge. (As all these scarabs were bought there is no provenance for them.)
M. Ge. Macalister. Gezer.
R.S.M.E. Royal Scottish Museum. Edinburgh.

Pl. IX.

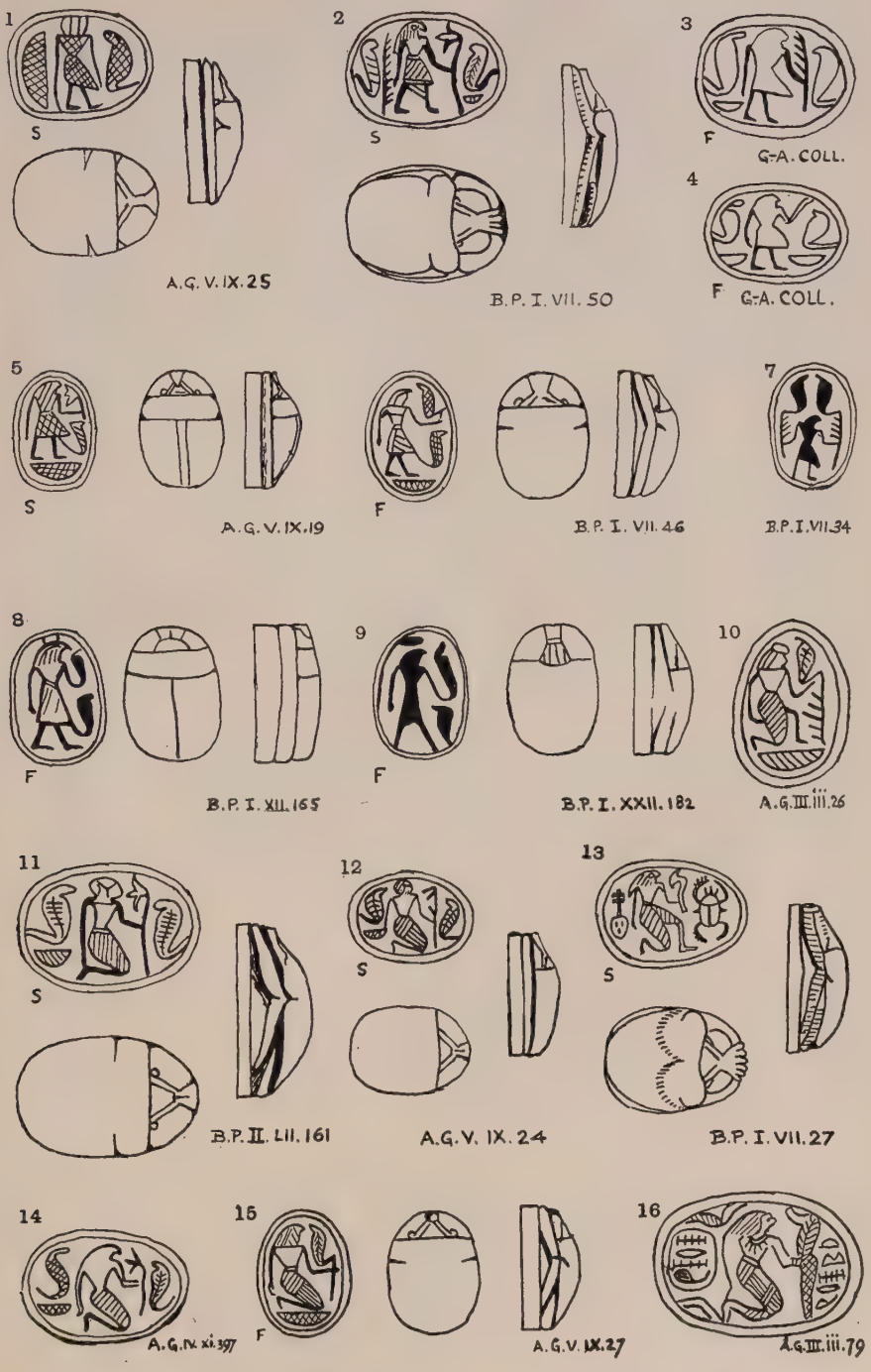
1. A.G., V, ix, 25. 879″ above sea level.
2. B.P., I, vii, 50. Tomb 558. With another scarab (in bronze setting) and one toggle.
3. G.A. Coll. Unpublished.
4. G.A. Coll. Unpublished.
5. A.G., V, ix, 19.
6. B.P., I, vii, 46, p. 3. Tomb 545. With four scarabs and two toggles.
7. B.P., I, vii, 34. Tomb 568. Ten scarabs (seven plain), faience vase, one toggle, bone inlay, and beads.
8. B.P., I, xii, 165, p. 7. Tomb 902. Philistine period.
9. B.P., I, xxii, 182, p. 9. Tomb 901. Philistine period.
10. A.G., III, iii, 26. 745″ above sea level.
11. B.P., II, lii, 161, p. 24. Group 934.
12. A.G., V, ix, 24.
13. B.P. I, vii, 27, pp. 2, 3. Tomb 550. Four other scarabs, one toggle, dagger, glazed.
14. A.G., IV, xi, 397. Surface find.
15. A.G., V, ix, 27. 907″ above sea level.
16. A.G., III, iii, 79. K.L. area of Town. 800″ above sea level.

Pl. X.

1. A.G., V, ix, 39. 835″ above sea-level.
2. B.P , II, xliii, 13. In bronze ring. With a large group of objects.
3. A.G., I, xiv, 92. Tomb 255.
4. Jericho. From Garstang's excavations.
5. A.G., I, xiv, 118. Tomb 13.
6. G.A. Coll. Unpublished.
7. A.G., I, xiii, 53.
8. A.G., II, viii, 157.
9. B.P., I, xii, 137. With inlaid dagger late in series ; ring-and-dot scarab ; *sa*-scarab (late) ; large two-handled bowl ; bowl with handle below rim ; juglet ; lamp.
10. A.G., V, ix, 16. Surface find.
11. A.G., IV, xi, 439. Area X.
12. A.G., IV, v, 134. Area J. 810″ above sea level.
13. A.G. Surface find. Unpublished.
14. A.G., V, ix, 40. 906″ above sea level.
15. A.G., IV, v, 24. Area M. 663″ above sea level.
16. A.G., IV, v, 63. Area T. 720″ above sea level.
17. A.G., IV, v, 104. Area E. 780″ above sea level.
18. B.P., I, xii, 145. Area 900.
19. A.G., I, xiv, 131. Tomb 290.

Pl. XI.

1. A.G., I, xiii, 74. City. Level III under burnt layer.
2. M. Ge, III, xxxv, 14.
3. A.G., II, vii, 103, pp. 5, 9. Xth dynasty. Cemetery in court of palace.
4. M. Ge, III, cciia, y.
5. A.G., IV, v, 74. Area G. 750″ above sea level.
6. A.G., I, xiii, 16. City Level II. Room Z.
7. B.P., II, xliv, 69, p. 22. Tomb 1026. With four other scarabs and three toggles.
8. A.G., V, ix, 41. 946″ above sea level.
9. R.S.M.E. Unpublished.
10. A.G., V, ix, 23. 856″ above sea level.
11. A.G., II, viii, 124. Cemetery 1,000. Surface find.
12. G.A. Coll. Unpublished.
13. B.P., I, x, 79. Tomb 559. With four other scarabs and rivetted dagger.
14. A.G., V, ix, 26. 936″ above sea level.
15. A.G., II, vii, 90. Area E. 1,160″ above sea level.
16. A.G., I, xiv, 107. Tomb 417.
17. A.G., V, ix, 22. 851″ above sea level.
18. A.G., V, ix, 30. 871″ above sea level.
19. G.A. Coll. Unpublished.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B.P.I.XII.165
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A.G.III.iii.26
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B.P.II.LII.161
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A.G.V.IX.24
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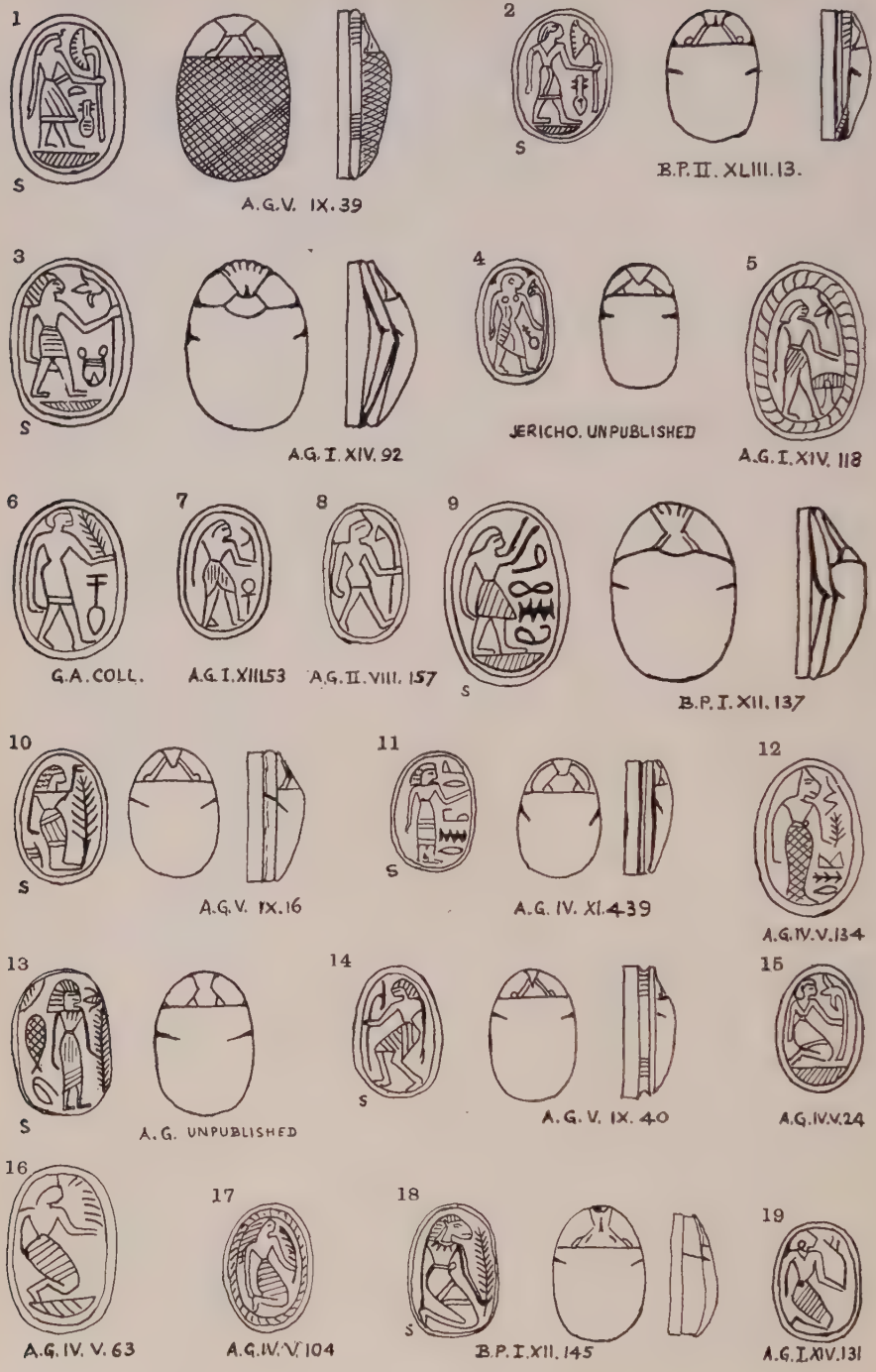
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A.G.I. XIII.53
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A.G.II. VIII. 157
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B.P.I. XII. 137
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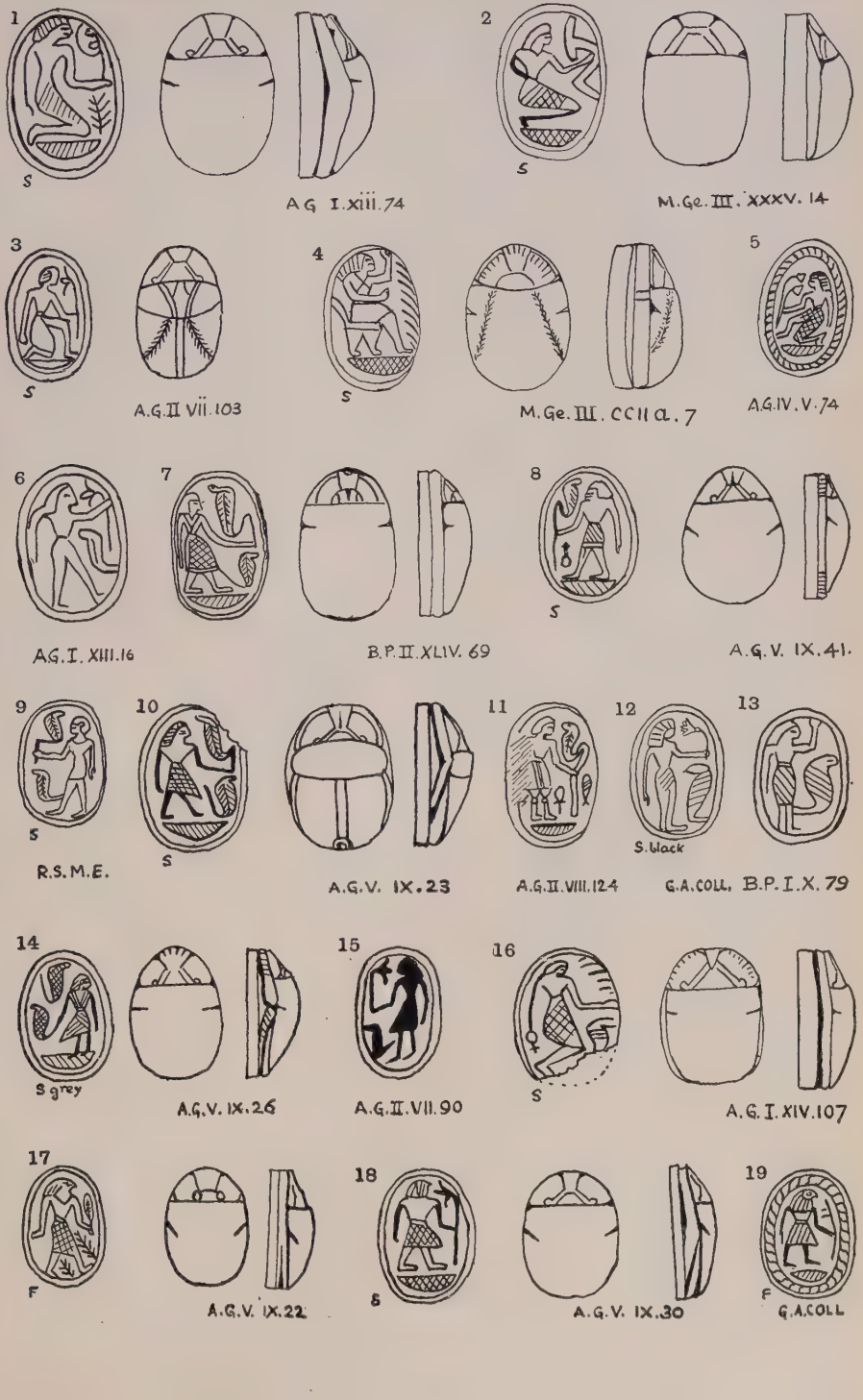
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AG.I.XIII.16
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A.G.II.VIII.124
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G.A.COLL. B.P.I.X.79
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A.G.V. IX.26
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A.G.II.VII.90
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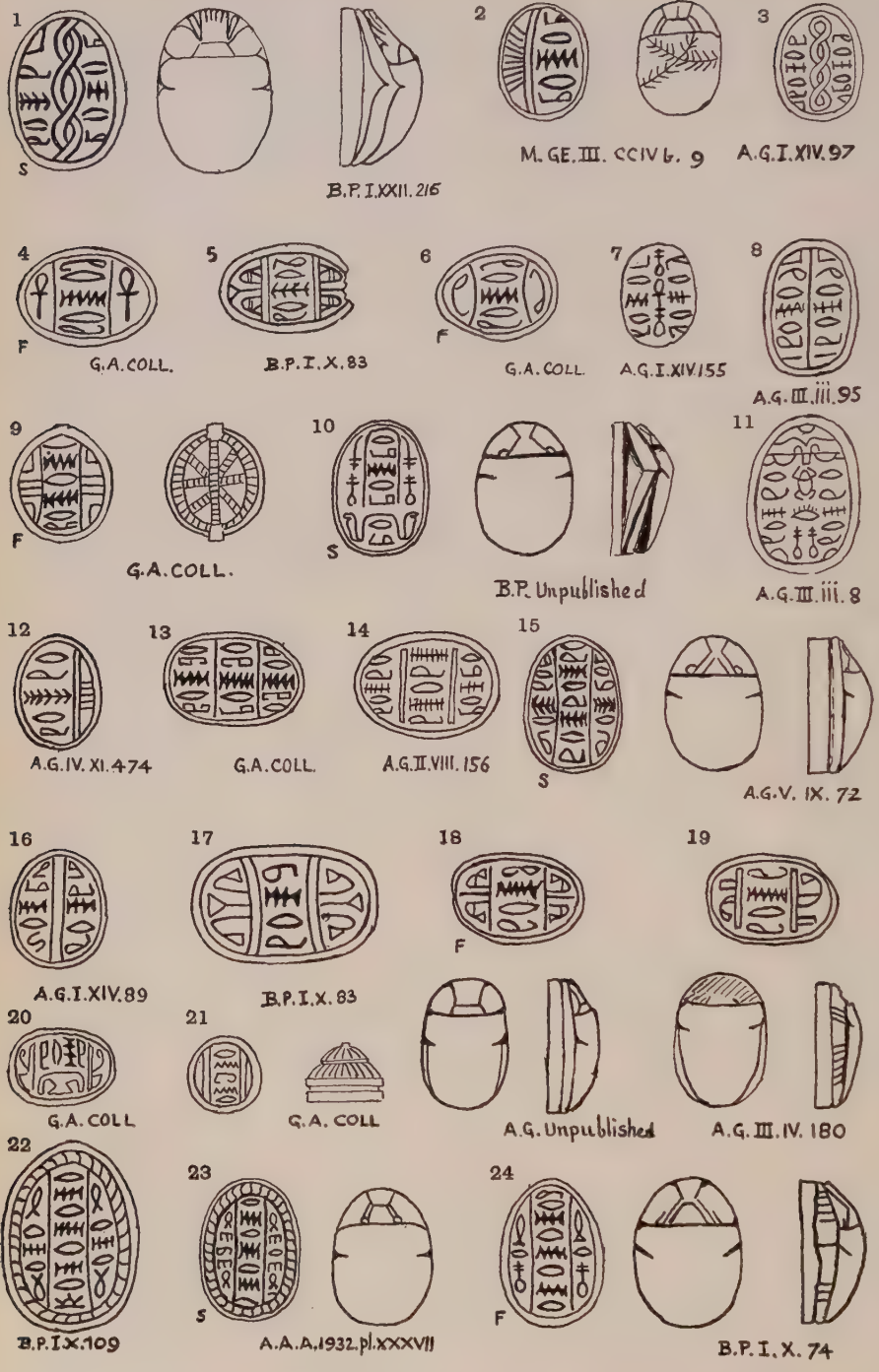
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G.A.COLL.
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A.G. Unpublished
A.G. III. IV. 180
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B.P.IX.109
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B.P.I.X.74

Pl. IV.

1. B.P., I, xxii, 216. Tomb 587. With one toggle.
2. M. Ge., III, pl. cciv, b. 9.
3. A.G., I, xiv, 97. Tomb 263.
4. G.A. Coll. Unpublished.
5. B.P., I, x, 83. Tomb 590. With pottery and eleven other scarabs. Dyn. xvi.
7. A.G., I, xiv, 155.
8. A.G., III, iii, 95. K.L. area. 945″ above sea level.
9. G.A. Coll. Unpublished.
10. B.P. Unpublished.
11. A.G., III, iii, 8. S.E. town. 690″ above sea level.
12. A.G., IV, xi, 475. Area J. 1,701″ above sea level.
13. G.A. Coll. Unpublished.
14. A.G., II, viiii, 156. Surface find.
15. A.G., V, ix, 72. Fine workmanship. 840″ above sea level.
16. A.G., I, xiv, 89. Tomb 187. Blue paste.
17. B.P., I, x, 83, p. 3. Tomb 559. With eight other scarabs, one toggle, dagger and beads.
18. A.G. Unpublished.
19. A.G., III, iv, 180. Surface find.
20. G.A. Unpublished.
21. G.A. Coll. Unpublished.
22. B.P., I, x, 109. Tomb 565. With 15 other scarabs, three toggles, worked flints, and beads.
23. A.A.A., 1932, pl. xxxvii.
24. B.P., I, x, 74, p. 3. Tomb 556. With 10 other scarabs, rivetted dagger, faience vase, six toggles, and beads.

THE "CHAIR OF MOSES" AND ITS SURVIVALS

By Cecil Roth

The study that follows will consider an old problem from an angle unfamiliar to students of Palestinian and New Testament archæology. Analogies with and interpretations of Jewish religious organisation in Palestine at the beginning of the Christian era have hitherto been sought, on the one hand in the approximately contemporaneous Talmudical literature, and on the other in the normative Jewish tradition which still generally prevails ; that is to say, in the synagogal organisation and practice of the great body of Jewry to-day, following in the main the Ashkenazi (*i.e.*, Germano-Polish) or to a less degree the Sephardi (*i.e.*, Spanish) rite. Formerly, however, there was greater diversity in Jewish religious life. The communities of every country had their own traditions, sometimes their own rite of prayer, vestiges of which still survive here and there. The traveller or the student may sometimes therefore come across relics or memories overlooked by scholars who have trodden the conventional path, which provide remarkable parallels to, or throw new light upon, archæological or even exegetical problems. The example that will engage us here—part of a larger study—is typical of the unexpected results that such investigation may bring.

There is a famous reference in the Gospels : (Matthew xxiii. 2) : *The Scribes and the Pharisees sit in Moses' seat* (ἐπὶ τῆς Μωσέως καθέδρας). It is natural to explain this metaphorically, as early scholars did, believing the passage to imply that the scribes and Pharisees took upon themselves the authority of the Lawgiver. It was indeed pointed out some time ago[1] that R. Aḥa, a Palestinian scholar of the

[1] W. Bacher, *Le siège de Moïse*, in *Revue des Études Juives*, xxiv, 299 ff. ; cf. also S. Krauss in *haShiloah*, xxxix, 430.

fourth century (*Pesikta deRab Kahana*, ed. Buber, §i, p. 12) explained the Biblical description of Solomon's throne by saying that it was " like the *cathedra* of Moses " (קתדרא דמשה בהדא: the term used is the same as that in the saying of Jesus referred to above) which would suggest that some specific object was in his mind ; but its nature could not be ascertained. Recently, however, in the course of excavations of the Palestinian synagogues of the first centuries of the Christian era, there have been found stone chairs of a distinctive nature which have been unhesitatingly identified with the actual " Chair of Moses "[1] : it is believed that they were reserved for the most distinguished of the elders or " Rulers of the Synagogue," who as we know sat apart " with their faces to the congregation and their backs towards the Sanctuary."[2] The first *cathedra* of this type, 94 centimetres in height, was unearthed against the south wall of the synagogue of El Hammeh (the Baths of Tiberias) at the side of the Ark (' Torah-shrine ') and is carved out of a single block of white limestone[3] (Fig. 1); the second was found at Chorazin (Kerazeh), and like the rest of the building is of basalt[4]. Yet a third was reported to have been discovered outside Palestine, at Delos, and has been taken into account by the authorities who have written on the subject ; but Miss Belle Mazur has now conclusively shewn[5] that the building in question was not a synagogue, as the original excavators believed, and there is no reason to imagine that

[1] The identification was first suggested by J. Klausner in *haShiloah*, xxxix, 430 ; it was adopted by E. L. Sukenik in his detailed article on the Seat of Moses (very amply illustrated) in *Tarbiz* I. i, 145–52, summarised in his Schweich Lectures, *Ancient Synagogues in Palestine and Greece* (London, 1934), p. 57 ff. ; cf. also S. Krauss in *Revue des Études Juives* lxxxix, 392–3. On the other hand, M. Ginsburger, in an article *ibid.* xc. 161–5, drastically emends the reading of the Pesikta and argues that the Chair of Moses never existed.

[2] Tosefta, *Megillah* IV. 21.

[3] Proceedings of the Jewish Palestine Exploration Society, i. 30, and English synopsis, ii. 31.

[4] P.E.F.Q.S. 1927, 51 ff.

[5] In her *Studies on Jewry in Greece* (Athens, 1925) i, 20.

the objects found in it had any sort of Jewish association or application ; so that this is in fact no more than a ceremonial seat.

Three incidental observations must be made at this stage. The first is that the reference in the Gospels, literally inter-

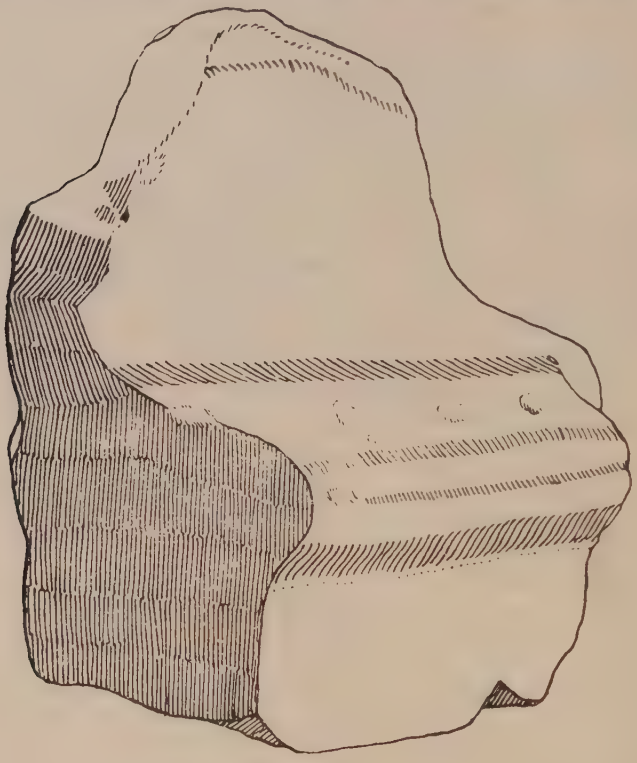


FIG. 1.

"CHAIR OF MOSES" FROM RUINS OF SYNAGOGUE AT EL-HAMMEH (FROM PROCEEDINGS OF JEWISH PALESTINE EXPLORATION SOCIETY, VOL. I.)

preted, would point, not to a single seat for the most important person in the spiritual administration of the synagogue (whoever he might have been—the sources do not favour the idea of an established Rabbinate in the modern sense

at this period), but to accommodation for a number of persons ; the *cathedrae* that have been found could not accommodate more than one.[1] Secondly, the Chorazin *cathedra* has inscribed on it a votive inscription referring to the embellishment of the synagogue (" Remembered for good be Judan bar Ishmael, who made this *stoa* and the steps ")[2] which one would expect to find on a principal rather than a merely incidental feature of the building.[3] Thirdly, it appears to me highly unlikely that pious Jews would have given the name " The Chair of Moses " to the place set aside for a contemporary teacher and leader, however eminent. Attention may, moreover, be called to the fact that in the El Hammeh *cathedra* there are three small holes bored into the stone, the purpose of which has not yet been explained.[4]

There is, as it happens, in Rome—the oldest community in Europe, and one of the oldest in the world, with a continuous tradition dating back to Classical times—a practice which perhaps explains both the Gospel allusion and the archæological discoveries. There are times in the synagogue service after the recital of the Lesson for the day (as for example, when the *Haphtarah* or Prophetical chapter is being read) when the Scroll of the Law is not in use, but has not yet been replaced in the Ark. The general usage at these times is for it to be held by some member of the congregation to whom the honour has been assigned. But, in Rome, it is to the present day placed on a receptacle facing the people and is left there. This receptacle, which

[1] I will not insist on the fact that they are not proportioned as though intended for practical use ; standards of comfort were then different, and moreover the occupant may have sat in the Oriental fashion, cross-legged.

[2] Cf. P.E.F.Q.S. 1927, pp. 51 ff., 101 ff. ; *Revue des Études Juives*, lxxxix, 389–393. I. N. Epstein, indeed, in a note in *Tarbiz* I. i. 152, suggests that the meaning of *stoa* in this inscription, is not " colonnade " but " stone seat," but this interpretation has not been accepted.

[3] The analogy would be an inscription on a pew commemorating the generosity of the person who built the entire church !

[4] See the description, *ut supra.*

is a prominent feature in the architecture of the Synagogue, is in the form of a chair. (There are analogous stands in some other synagogues, but this is the only one that I have seen of this description.) The seat is narrow, and would be highly uncomfortable for ordinary use, but for this pupose it is ideal. Incidentally, the Scroll is kept upright by means of two holes bored in the seat, into which are inserted the ends of the staves on which the parchment is wound.

It might be imagined that this is an ingenious modern device, for the Roman synagogue was constructed in the early years of the present century and without any strong regard for the traditional style. However, there is in the basement of the present building a sort of Lapidary Museum containing a large part of the internal appurtenances and adornments, largely of fine marble, from the ancient *scuole* destroyed by fire at the end of last century (up to which time there were as many as five places of worship following as many different liturgical rites situated under one roof, in order to avoid the Papal prohibition of a plurality of synagogues !). Among these relics there are included more than one elaborate marble " chair " (the traditional Hebrew term among Roman Jewry is, in fact, כסא) similar to that used in the Great Synagogue ; some of them have now been placed in other places of worship belonging to the community. These bear votive inscriptions, the oldest—from the former Sicilian Synagogue—being of 1594. Some similar objects are extant also in wood. The number of holes in the seats is sometimes two, sometimes four (to hold two scrolls)[1].

[1] I am obliged to Dr. Dante Lattes, of Rome, for refreshing my memory in this matter, and for sending me copies of the inscriptions on some of the oldest of these chairs. That of 1602 commemorates the gift by David Viterbo " from the pillars upwards " (מן חעמודים ולמעלה) —an extraordinary but certainly accidental coincidence with the reference on the Chorazin *cathedra* to the building of the *stoa*. There was an article on these " chairs " in the bulletin of the Roman community, *La communità israelitica*, of September, 1937. An illustration of one of them, of 1623, figures in the Jewish Encyclopædia, x. 456, incorrectly described as the Rabbi's Chair.

To apply the name " the Chair of Moses " to such an object, used to accommodate the Scroll of the Pentateuch, would be natural enough ; and one can now appreciate the sarcasm of Jesus' reference to those scholars who " sat " therein—that is, arrogated to themselves the authority of the Lawgiver himself. If the analogy suggested is correct, the three holes in the seat of the El-Hammeh *cathedra* can at last be explained. As in Rome, they were made to receive the ends of the staves on which the Scroll of the Law was wound, so as to keep it upright ; to the present day, there are three of these in the Samaritan usage, and it is not unlikely that this was once the universal practice. There is in fact in the Talmud a clear literary indication that, in the fourth century, it was customary to place the Scroll of the Law on a chair provided for this purpose in the Synagogue, though the Babylonian scholar, Rabba, seems to have considered it an innovation, the practice being perhaps introduced recently from Palestine[1].

We may turn for confirmation of this hypothesis to another Jewish community, now no longer in existence. The native Chinese Jewish group at Kai-Feng-Fu, whose origins go back to remote antiquity, fell into complete decadence at the beginning of the nineteenth century, so that to-day nothing is left except the bare recollection of Jewish descent by a handful of families.[2] At the beginning of the eighteenth century, however, when the tradition was still completely alive, the community was visited (1704) by a Jesuit father, Jean-Paul Gozani, whose detailed description of the synagogue was published[3]; he tells how it was divided into three naves, the

[1] T. B. Megillah, 26b : Rabba said : " Originally, I considered that the Chair [in the Synagogue] was an incidental appurtenance of worship, and was permitted for other use. When I saw that they placed the *Sepher Torah* on it, I realised that it was a direct appurtenance, and is therefore forbidden." (Rashi interprets the Aramaic term used, כורסייא, as " a wooden pulpit," indicating that in North France in his day the use of the Chair for this purpose had been forgotten.)

[2] Cf. the sumptuous publication of W. C. White, *Chinese Jews*, 3 vols., Toronto, 1942, where there is the fullest guidance to the older literature.

[3] In *Lettres édifiantes et curieuses*, xviii (Paris, 1781) 31–48 : translation in White, *Chinese Jews*, 1. 39 ff.

middle one being " for the Tablet of Incense, Moses' Chair[1] and the *Wan-sui-p'ai*, or Emperor's tablet." Father Gabriel Brotier (c. 1770) repeats the information, though at second-hand, and explains : " He who is to read places the *Ta Ching* (Scriptures) on the Chair of Moses."[2] About the appearance of this object there is no doubt, for Father Domenge, who was in Kai-Feng-Fu in 1722, and upon whom Brotier to some extent relied for his account, made a drawing of it which is still extant[3] ; it was a typical Chinese chair, raised on two steps (this, too, is a noteworthy detail), on which the scroll could be placed within its case for the reading. Here, then, as it seems, we have a survival down to relatively recent times of the actual object referred to in the Gospels and recovered in the course of excavations.

The traditional association of a Chair with synagogue architecture continued into modern times in other places as well, though with a different ascription. The isolated communities of Avignon and the Comtat Venaissin, in the south of France, preserved their own traditions with remarkable fortitude down to the close of the eighteenth century. In the characteristic Jewish religious architecture of this region, such as it may still be observed in the abandoned synagogues of Carpentras and Cavaillon, and as it formerly obtained in those now no longer standing in Avignon and L'Isle-sur-Sorgue, it was customary for the " torah-shrine " to be flanked by two niches, one on either side, some three or four feet above the floor level. That on the left was reserved for displaying the *lulab* (palm-branch) during the

[1] " La chaire de Moïse " ; it is to be remembered that *chaire* can mean " pulpit " as well as " seat " or " throne " [of a bishop, &c.]. Unfortunately, Gozani fails in this case to give the Chinese equivalent, and it is not wholly impossible that he is himself responsible for the nomenclature. In this case one is left with the problem of deciding whence he derived this exegesis.

[2] *Lettres édifiantes*, xxiv. 56–101. White, *Chinese Jews*, pp. 49–68.

[3] See the illustration, reproducing Father Brucker's copy of the sketch sent to Europe by Father Domenge together with the plan of the Synagogue.

feast of Tabernacles.[1] In that to the right was placed a miniature chair ; this was the " Chair of Elijah," which according to a universal Jewish tradition is reserved at the ceremony of circumcision for the invisible presence of the undying Prophet who is to harbinger the Redemption. The general usage in former times (abandoned in Western Europe and America now that the ceremony takes place in the home) was for the Chair of Elijah, elaborately carved with Jewish symbols, to be stored in the purlieus of the place of worship, being brought inside only when a circumcision was to take place ; it was (so far as I know) only in the Comtat Venaissin that it constituted a prominent and invariable part of the interior equipment, and indeed architecture, of the Synagogue. One wonders whether this was not perhaps in origin the " Chair of Moses," used to display the Scroll of the Law, and converted into the " Chair of Elijah " only when its original use was forgotten. It would in fact have been not unnatural for a child to be ceremonially presented to the " Chair of Moses," associated with the *Torah*, when he made his first public appearance in the Congregation.[2] In due course, this gradually became in most places the main use of the *cathedra*, which thereupon changed its name, becoming associated in popular fancy

[1] This brings me to another aspect of my general thesis. For an architectural feature of the synagogue to be designed to hold an object used only during a single week of the year is surprising. But there is evidence (*e.g.*, on the early Jewish coins, or in the representations of the Synagogue on the glass plates found in the catacombs, as well as in some literary passages, *e.g.*, the story of the entry of Jesus into Jerusalem) that in the period of the Second Temple the palm-branch was not associated solely with the Feast of Tabernacles, but was a universal symbol of Jewish religious observance. This would explain the vestigial importance assigned to it in the South French synagogues, which may preserve an ancient tradition in this respect also.

[2] An analogous usage, called " la mise au berceau," survived, as it happens, until fairly recent times—also in Southern France ; cf. for details of the actual practice, M. Milhaud, *Rituel des Prières en hébreu à l'usage de l'ancien Comtat* (Aix, 1855), pp. 148–49 ; the godfather held an open bible in front of the cradle, while a prayer was recited expressing the hope that the child would study and fulfil all that was written in the Book.

with the prophet who was supposed to be present at the ceremony. In the end it consequently ceased to be a feature of the synagogue interior, henceforth being brought within, as the Chair of Elijah, only when it was actually required for use.[1]

This hypothesis received important independent confirmation, after my investigation had reached this stage, from the publication of the results of the excavations of the Byzantine-period synagogue at Eshtemoa, in the Hebron district, in South Palestine. The relevant passage in the excavator's account may be quoted at length[2] :—

> *The Niches.* At a height of 208 cms. there were three niches, a big one flanked by two smaller ones. The former is 173 cms. wide and 86 cms. deep, opening into a rectangle 211 cms. wide and 73 cms. deep, thus of a total depth of nearly 160 cms. The western niche is 47 cms. deep, 85 cms. wide, opening into a rectangle 81 cms. wide and 63 cms. deep, with a total depth of 110 cms. A corresponding small niche on the eastern side has disappeared during the building of a new house, and only the beginning of it can be traced. These niches were built of the most carefully worked stones. In the central niche one course only was found intact, but the three layers of the side niche possibly represent its original height up to its proper ceiling.

The excavators go on to suggest that this was the normal arrangement of Palestinian synagogues of the Roman period ; but, since in most of them the only lower courses of the walls are at present standing, this feature has not been preserved elsewhere.[3]

It is natural to assume that the central niche was for holding the sacred scrolls—the outstanding feature of synagogal worship ; the purpose of the lateral ones is a matter of hypothesis. In normal practice the central recess

[1] It may be added that exceptional importance seems to have been attached to the Chair of Elijah in another isolated Asiatic community, that of Cochin (S. India) ; cf. A. B. Salem, *Eternal Light* (Ernakulam, 1929), pp. 6–9.

[2] *Cf.* L. A. Mayer and A. Reifenberg, *The Synagogue of Eshtemoa : Preliminary Report* in Journal of the Palestine Oriental Society, xix. p. 317.

[3] This is, however, disputed by Sukenik in his review of the Eshtemoa discoveries in *Kedem*, vol. i.

remained as the "torah-shrine" or "Ark," as it is generally called in English usage (ארון-קדש, היכל); sometimes, however, being replaced by a cupboard or shrine designed for the same purpose. The lateral niches on the other hand disappeared in general use; but it would certainly seem to be more than a coincidence that they remained as part of the conventional, quasi-prescriptive, plan of the synagogues of the Comtat Venaissin. In view of this, we are justified in attempting to determine their purpose by arguing backwards in time. They were not, as the excavators of the Eshtemoa synagogue go on to suggest, to accommodate the seven-branched candelabra which were a normal synagogal appurtenance at this period; for the conventional representations of the ancient Jewish places of worship do not suggest that these were displayed in any such fashion (sometimes, indeed, there was only one candelabrum, not two). The niche on the one side, I suggest, was for displaying the *lulab* or palm-branch, perhaps throughout the year; that on the other was for the symbolic Chair ("of Moses"), whatever its precise purpose.

A tentative suggestion of the excavators of the Eshtemoa synagogue, who, as we have seen, approach the matter from an entirely different point of view, confirms this suggestion in a striking fashion. They write[1]:—

> On the plans of the Byzantine synagogues in Palestine, especially those of the fifth century, we find a niche on the ground floor, as a rule one or two steps above the floor. Such niches have always been assumed to be identical with the thora-shrine, although there is one important reason militating against this theory. If, during the Roman period, we find the thora-shrine higher than a very tall man's height above the floor, and if from the Arab conquest onward throughout the Middle Ages we again find it high up in the wall, there is a good reason to enquire whether during the Byzantine period alone the thora-shrine was on the ground floor. The question arises, therefore, whether we shall not have to reconsider this identification of the thora-shrine with the niche on the ground floor. Without exception we find the latter connected with the bench of the elders, so that one may ask whether this niche was not meant to receive the Chair of Moses . . . It may perhaps be not too bold to suggest that at el-Hammeh the Chair of Moses was

[1] *Ut supra* pp. 321–2.

originally placed not on the floor . . . but in the niche behind. . . . Towards the end of the first millennium C.E., the Chair of Moses disappeared from the synagogues entirely, being replaced by a movable Chair of Elijah serving of course quite different purposes, and with the former the niche on the ground floor disappeared as well.

This statement has to be qualified. The Chair of Moses did not disappear everywhere, as we have seen in the case of Kai-Feng-Fu ; and the niche in its turn did not disappear entirely, as we have seen in the case of the Provençal synagogues. The historical vestiges thus dovetail in a remarkable fashion with the evidence deduced here from archæological enquiry ; though sufficient reason has been given above, as I believe, for suggesting that the *cathedra* was installed not in the central but in one of the lateral niches.[1]

Taking all the evidence into consideration, we may tentatively put forward the following suggestion regarding the origin, purpose and metamorphosis of the " Chair of Moses." It was in origin, not a ceremonial seat, but a stand in the form of a chair, in which the Scroll of the Law was placed ; hence to " sit in the Chair of Moses " was a symbol of intellectual arrogance. The Chair of Moses continued in use with much the same object in the Roman community, whose origin certainly goes back before this time, and in the " Orphan Colony " of Jews in China, down to a relatively recent date. In the Palestinian synagogues, however, the original purpose of the Chair of Moses was superseded, perhaps when the torah-shrine was introduced as a permanent architectural feature of the synagogue (instead of being brought into the building only occasionally). It now became a mere symbol, and was placed, almost out of reach, in one of the lateral niches which flanked that intended for the *torah*, the other being

[1] It may be observed that the well-known miniature of a synagogue interior in the thirteenth-century Haggadah of Sarajevo (often reproduced : e.g. *Jewish Encyclopaedia* xi. 622) shows two inconsequential niches (readily distinguishable from the barred windows above them) at the side of the Ark-recess : and that in some modern Italian synagogues the stands for the Scrolls, inside the Ark, are in the form of chairs.

TEMPLE ou SYNAGOGUE

DES

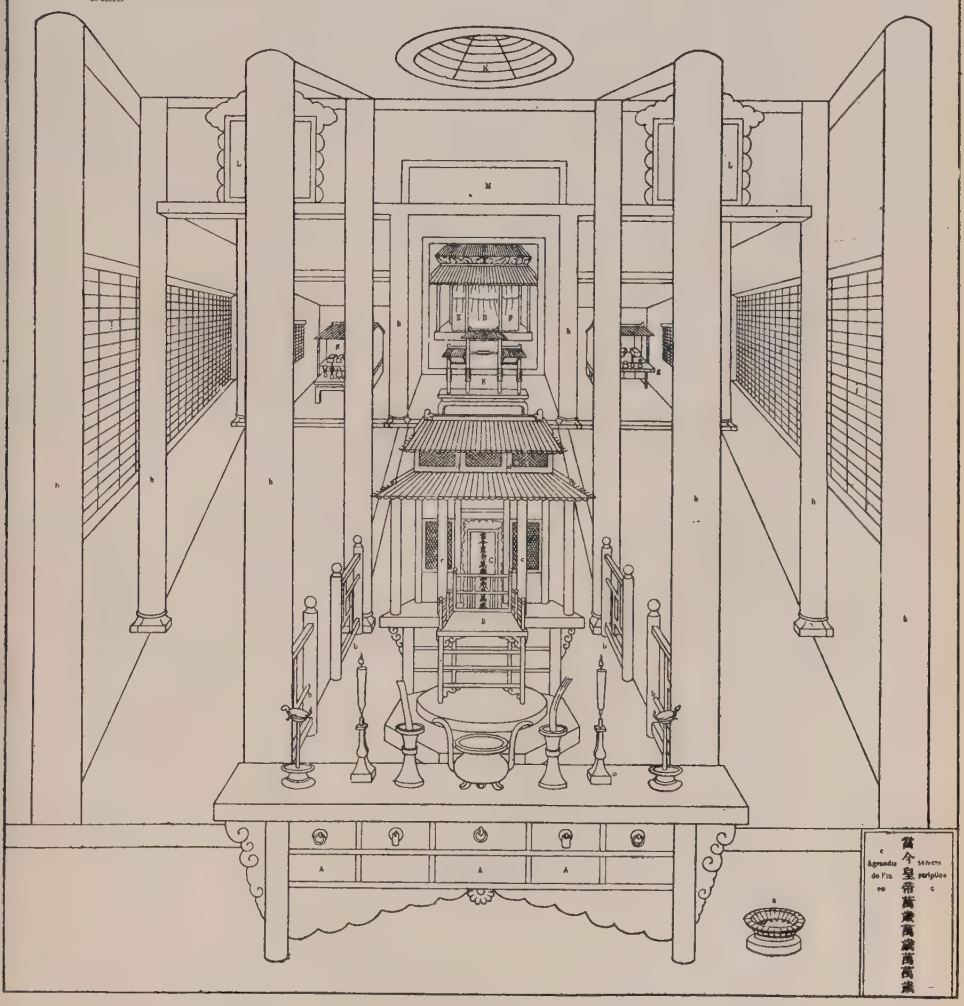
JUIFS DE CAIFUM

FIGURE II

(CALQUÉ SUR LE DESSIN DU P. DOMENGE S.J. PAR LE P. J. BRUKER S.J.)

A A Grande Table des parfums
B Chaire de Moïse avec son dossier.
b b Balustrade qui continue jusqu'au Bethel
C c c *Pan* aussi en inscription ou Tablette de l'empereur, en lettres d'or, avec ses pilastres et son couronnement
C Arcade à trois voûtes sur laquelle est l'inscription rapportée, en lettres d'or, sur sa base en forme de tablette (*Voir cette inscription dans les Lettres édif.* Mém. du P. Brotier).
D E F Bethel avec son dome, carré en dehors et rond en dedans

G G Armoires pour les Bibles sacrées.
h h h Colonnade du temple. — 144 Pendres.
K Bassin à laver les mains.
L L Les deux tablet de la loi avec leurs pieds et ornements, en caractères d'or
M Inscription. C'est la première en entrant, posée sur le *Pan* aussi de l'empereur (*Voir Let. édif.*).
N Dome sur la chaire de Moïse.
Largeur du temple environ 40 pieds
Profondeur..... 80 ....



Interior of Synagogue at Kai-Feng-Fu shewing "Chair of Moses" (B) from Tobar, Inscriptions Juives de Kai-Fong-Fou)

"Chair of Moses" from Synagogue at Kai-Feng-Fu (after Tobar, Inscriptions Juives de Kai-Fong-Fou)

CHAIR OF ELIJAH FROM SYNAGOGUE AT CARPENTRAS, PROVENCE
(SHEWING NICHE)

"CHAIR OF MOSES" FROM RUINS OF SYNAGOGUE AT CHORAZIN (KERAZEH), FROM TARBIZ, VOL. I.

used for displaying—not perhaps only during Tabernacles—the Palm branch and possibly other ritual appurtenances. The symbolism of the Chair was in due course forgotten, and ultimately it was regarded as the vacant seat reserved for the prophet Elijah, and brought down for his occupancy during the circumcision ceremony, which he was supposed to attend. Thus, in due course, the Chair of Moses became the Chair of Elijah. Though elaborately carved, it was now divorced from the architectural scheme, being brought into the Synagogue only when the circumcision was to take place. Only in Southern France the position remained as before ; and it continued to be an integral feature of the synagogue interior, architectural provision being made for it as before in a special niche at the side of the Ark.

Jesus' satirical reference was hence neither as metaphorical as early scholars believed, nor as literal as modern archæologists suggested. The Chair of Moses existed in his day, but it was not intended for actual use, nor was it one on which a plurality of scribes and Pharisees could conceivably have sat.

THE DEAD SEA SCROLLS

By G. Lankester Harding

In February last a detachment of the Arab Legion under the command of Capt. Akkash el Zebn succeeded in locating the cave in which were found the now famous Hebrew scrolls. The Trans-Jordan Department of Antiquities undertook the work of excavation, and in view of the importance of the find and the aura of secrecy which surrounded the original discovery, I invited the co-operation of the École Biblique et Archéologique Française of Jerusalem, which was most willingly given, and Père de Vaux remained throughout the whole period of excavation, which was nearly three weeks. The Palestine Archæological Museum also contributed valuable assistance in many ways.

The cave is situated some eight kilos. south of what was once the Kallia Hotel along the track to Ain Feshkha, and in the foothills about two kilos from the shore of the Dead Sea, and about one kilo north of Kh. Qumran ; map reading approximately 1934 1287. Capt. Akkash did an excellent piece of work in locating the cave, as the area is remote and difficult of access. It is a natural cleft in the rock with at present two openings, the lower of which was made by the plunderers who excavated the cave last November or early December. The contents had been thoroughly turned over, and some of the rubbish thrown outside ; it was this new soil which first attracted Capt. Akkash's attention to the place. Up to the time of writing the original finder, who must be a goatherd, has not been located[1], so it is not possible to say what the cave looked like then. In view of what follows it will be realised that this is an important point.

[1] Since writing this, Mr. Saad, Secretary of the Palestine Museum, has had an interview with the goatherd.

Many sherds and much linen were lying about in the filling and the rubbish outside, and work was commenced on the latter. Almost at once a fragment of inscribed parchment was found, and in all some hundreds of fragments, varying in size from a few millimetres square to a third of a roll, were recovered. From the work so far done on the pottery there would seem to have been some forty jars and as many bowls, which latter were presumably inverted over the necks of the jars to close them. One piece of a long-spouted, hand-made lamp was found, and I have seen another from the cave in the St. Mark's Monastery in Jerusalem[1]. All this pottery is certainly pre-Roman, and most probably of the 2nd century B.C. Some fragments of a Roman cooking pot and a spout of a Roman lamp were also found, but at least 95 per cent. of the pottery is consistent in ware, form and date.

Among the inscribed fragments recovered are some of papyrus, written in some cases on both sides. A number of the parchment fragments can be identified with some of the eight scrolls already made public, in particular the Habakkuk commentary, the books of Hymns, and the War of the Children of Light. All these are written in the square Hebrew script. One of the most important finds consists of fragments of scrolls in the earlier Phoenician type of script. Preliminary study of these by Père de Vaux reveals that they are of the book of Leviticus, Chaps. 19–22. Some other fragments in the square script, which have been acquired from an outside source, are of the book of Deuteronomy ; there are also fragments of Genesis and Judges, as well as other non-Biblical books. One fragment in the square script has the name אל written in the early script.

Judging from the quantity of linen recovered, it would appear to have been used as packing for the scrolls in the pots as well as for wrapping them. It consists mostly of squares varying from 20–50 cms. in size, and some pieces have a simple pattern in light blue threads woven in. The

[1] The owner of the lamp has subsequently presented it to the Palestine Archæological Museum.

edges of most of the squares are rolled and overstitched, but one larger piece has the two selvedges and the ends left rough. There are several qualities of weave and spinning, some being quite fine. Many pieces are impregnated with what seems to be wax. A few fragments of string and thread were also recovered.

Although no complete rolls or even very large fragments were recovered, the excavations are important in that they place beyond all possible doubt the authenticity of the hoard. It is also clear that the documents were all placed in the cave in one period, most probably the 2nd century B.C., and there is also no doubt that the find is a fairly recent one. But it has not entirely cleared up the question as to what the hoard represents. Was it a deposit for safety in a time of trouble or was it a "Genizah" or cache of disused documents from a synagogue? Against the latter theory is the fact that they were apparently all deposited at one time; in its favour is the fact that on one piece of scroll found there is a bitumen coating actually on the parchment, which meant that that particular scroll could not be used again. The variety of books so far identified—Genesis, Deuteronomy, Leviticus, Judges, Isaiah, Habakkuk commentary, Hymns, Ritual, a war—suggests a religious library; even if there was originally only one scroll in each pot it was quite a considerable library, and the scrolls themselves are by no means all of one period. The balance of evidence seems to be in favour of a deposit for safety, later forgotten perhaps on account of the death of those who placed them there, but there is still an element of doubt.

The question that arises is where now are these additional scrolls? There is very strong internal evidence that there was a plundering of the cave in early, perhaps Roman times. The evidence is: (*a*) the presence of some Roman pottery; (*b*) some of the jars and bowls have been broken anciently; (*c*) much of the damage to the scrolls has been done by white ants, which could hardly have got into closed pots; (*d*) in some small bundles of fragments stuck together there are pieces of three or four different scrolls, even in

one case a piece of papyrus in the middle of a parchment fragment ; (*e*) in some cases where one piece has lain on another the covered part remains white while the exposed part has turned dark brown ; this is unlikely to happen in 18 months ; (*f*) a deposit of animal droppings about 15 cms. thick covered some part of the cave, and fragments of linen were adhering to the underpart of this deposit ; there is also a fragment of what looks like papyrus mixed up in it. There is also to be considered the note of Origen that under Caracalla some Hebrew and Greek manuscripts were found in jars in a cave near Jericho.

So we are left with three possibilities for the whereabouts of the additional scrolls.

(*a*) They are still with the original finder or with the St. Mark's Monastery (who may have smuggled them out of the country).

(*b*) They were lost at the time of the Roman plundering.

(*c*) They have been lost through the careless handling of the most recent plunderers.

There is no doubt that the documents have passed through many hands recently, but it is much to be deplored that those scientific institutions which had the opportunity of first handling these priceless remains did not lay proper information with, and invoke the help of, the Department of Antiquities in Jerusalem, which was functioning fully right up to the end. Dr. Sukenik, who seems to have been the first to see the scrolls, said nothing to the Department. Mr. Iliffe writes that nothing was said to him about a new find of manuscripts, nor any hint given of the discovery of the cave. In a letter from Mr. Hamilton he tells me that Dr. Trever informed him " of the existence of three (?) scrolls which were in the possession of the Convent of St. Mark and had been there, according to his information, for about 20 years, kept apparently in an old suitcase on the premises." Compare, however, Dr. Trever's account of the discovery as published in the Biblical Archæologist, Vol. XI, No. 3.

He encouraged, and openly rejoices in, the smuggling of the documents out of the country; they are now in America. Dr. Burrows, on his return, took no action *vis-à-vis* the Department. Conditions were admittedly difficult in the beginning of 1948, but the American School was in constant touch with the Department (see again Dr. Trever's article referred to above), and people from St. Mark's Convent could apparently come and go between the Old City and the American School with ease. Until the original finder has been interviewed it is impossible to know how many scrolls really constitute the discovery, but for any loss, and certainly for a great deal of the damage, Drs. Sukenik, Trever and Burrows and the Metropolitan of St. Mark's must bear the blame. The antiquity dealers who also had the handling of the scrolls can scarcely be expected to report the matter officially, though in theory they are supposed to do so. To make the matter quite clear, the following are the dates relative to the find :—

(*a*) Original discovery in late summer or autumn, 1947, presumably taken to the dealers and so to the Hebrew University within a month or so.

(*b*) Dr. Trever photographs the scrolls February, 1948.

(*c*) Department of Antiquities closes early May, 1948.

Let us end on the hope that we may yet recover more of this unique discovery, and that no scrolls have been lost through careless handling.

FIG. 1 THE VALLEY IN WHICH THE CAVE IS SITUATED : IT IS TO THE LEFT OF THE CAVE OPENING IN THE CENTRE OF THE PICTURE BEHIND THE PROJECTING ROCK.

FIG. 2. ENTRANCE TO THE CAVE : THE LOWER HOLE WAS MADE BY THE PLUNDERERS, THE UPPER IS ORIGINAL.

INTERIOR OF THE CAVE LOOKING TOWARDS THE ENTRANCE.

ONE OF THE JARS, PARTIALLY RESTORED.

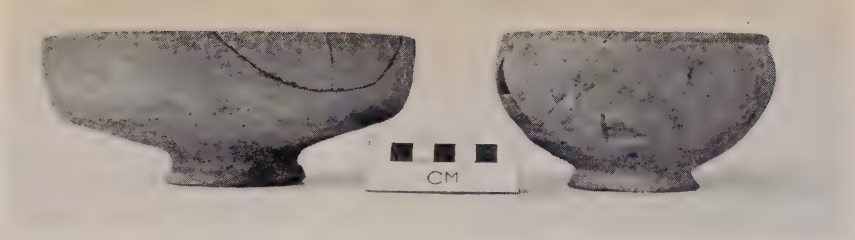


FIG. 1. THE BOWL ON THE LEFT IS OF THE USUAL TYPE : THAT ON THE RIGHT IS UNIQUE.

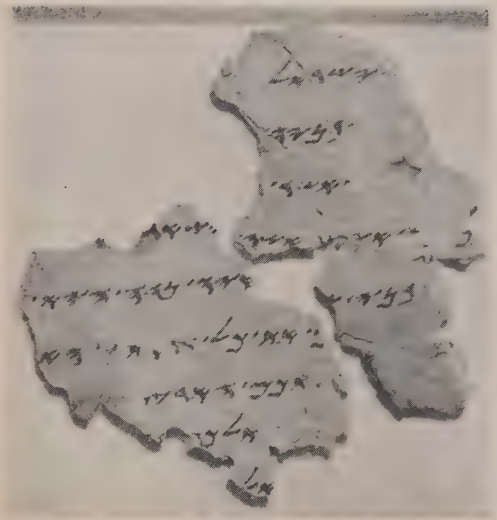


FIG. 2. FRAGMENTS IN THE EARLY SCRIPT.

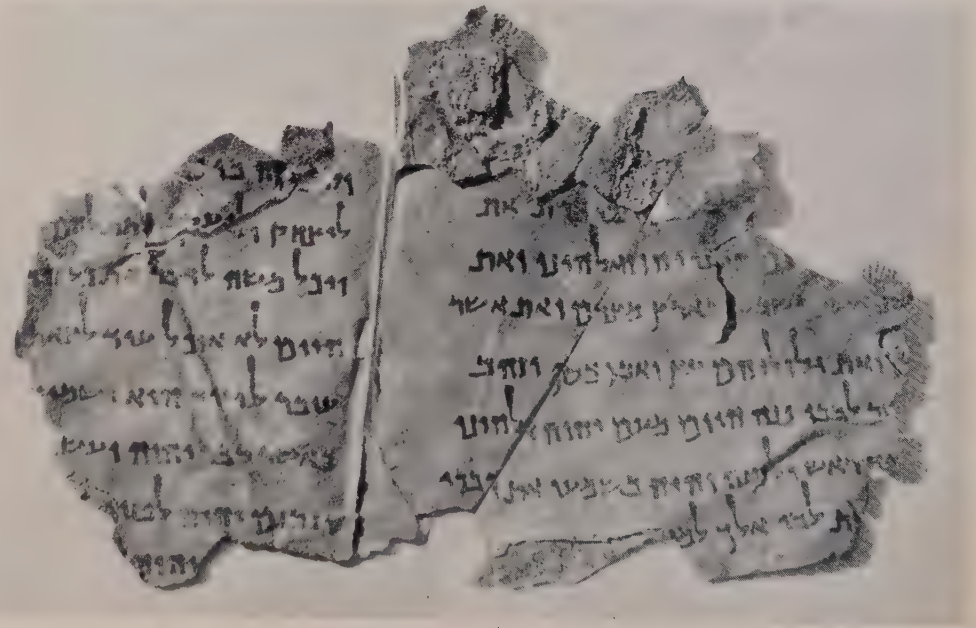


FIG. 3. FRAGMENTS OF DEUTERONOMY.

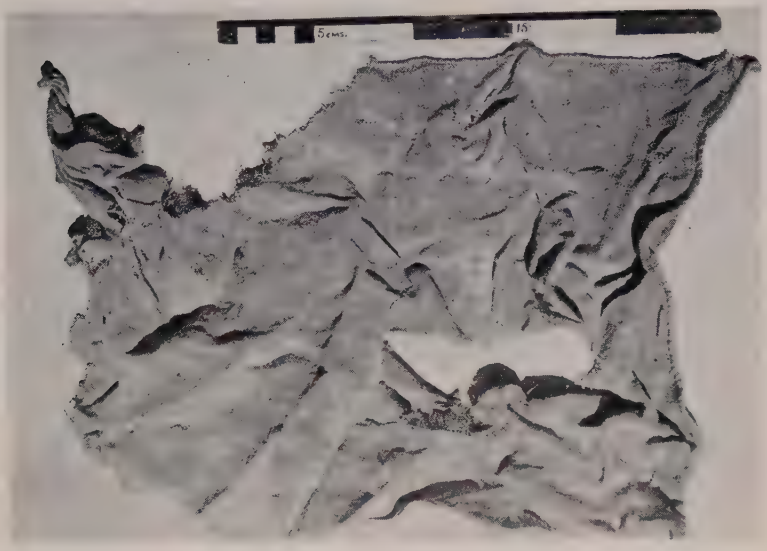


FIG. 1. ONE OF THE LINEN SQUARES USED FOR WRAPPING THE SCROLLS.

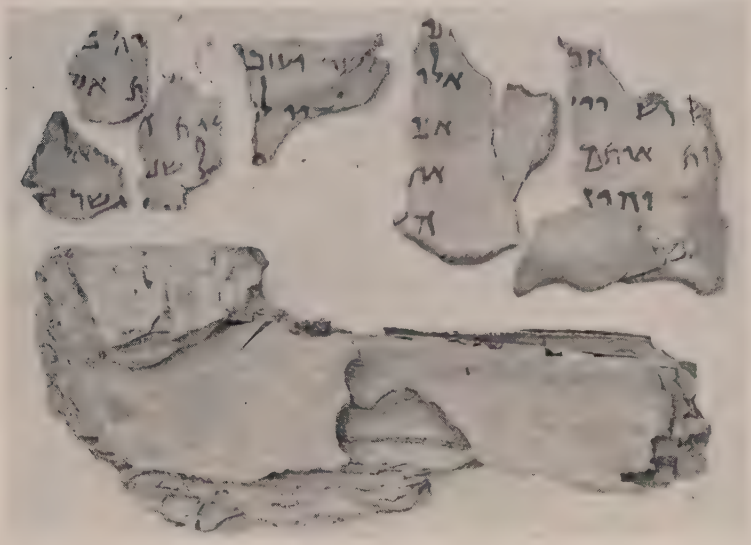


FIG. 2. PART OF A SCROLL AS YET UNOPENED.

ON " HURRIANS AND SUBARIANS " : A REVIEW ARTICLE

By Sidney Smith

Gelb, I. J. *Hurrians and Subarians.* (Studies in Ancient Oriental Civilization, No. 22.) Chicago. 1944.

The subject of this essay is of such importance for the study of Western Asia, whatever the particular land may be, during the second millennium B.C. that the long delay in the appearance of this review has been due partly to the exceptionally intricate nature of Dr. Gelb's argument and exposition and the desire to give both mature consideration. This explanation is no excuse and apologies for a fault due to other preoccupations are very sincerely tendered to the author.

The terms " Mitannians," " Subaraeans," " Hurrians " now occur so frequently and so confusingly in the literature dealing with early Western Asia that some clarification was much needed. The " Mitannians " are very briefly and rightly dismissed. There never was a people so called in the original documents ; the term was simply invented by modern scholarship to denote the population of Mitanni before the correct name for their language was known. Mitanni was simply a political unit in a confederacy of *Hurri* states ; when the king of that state was the suzerain of the whole confederacy, it could be used of that confederacy. It is true that Dr. Gelb does not believe this, but states that there is a " term Mittanni in a political sense " and " in a geographic sense," that " the occurrence of both Hanigalbat and Mittanni in a treaty " simply means " that Hanigalbat and Mittanni are . . . interchanged," p. 73, and that " the differentiation between the title of Artatama II . . . and Tušratta . . . in the treaty " can be explained away, p. 79. Partly synonymous terms can be on occasion

distinct ; it is not a sound historical method to discard such distinctions, particularly in important political documents, treaties. But Gelb's rejection of the term " Mitannians " is sound, and it is to be hoped that it will disappear.

The relation of the terms " Hurrians " and " Subaraeans " is more difficult to express. The Babylonians and Assyrians from the earliest times down to the sixth century used a geographical term (*mat*)*subartu*, *mat šubare* and a gentilic from that name. From the Boğaz Köi documents scholars learnt of a *mat Hurre* and of a language, clearly the language used by Dušratta of Mitanni, described by the Hittite adjective *hurla-*, " of the *Hurri*." Dr. Gelb says on p. 1, " Hurrians and Subaraeans, their lands and languages, are mentioned frequently in the cuneiform inscriptions discovered in the early 19th century during British excavations at Kuyunjik," and on p. 2, " the notions of early Assyriologists about Hurrians and Subarians are truly confused." Yet on p. 8 we read that " Winckler found . . . a new ethnic group which he called ' Charri ' ". This is rather slip-shod, but only important because it conceals a main factor in the problem. If Winckler or any one else had found the term *Hurri* in documents from Babylonia or Quyunjiq of any period, recognition of the existence of this people would have come before the excavations at Boğaz Köi. Not until the *Nuzu* documents, turned up in large numbers in 1923–24 by illicit digging, became known was it obvious that a large number of the personal names belonged to the language called by the Hittites " of the *Hurri*." This absence of mention in documents from Babylonia and Assyria has to be accounted for, not passed over in silence. Curiously enough, *mat šubare* appears very rarely, (*mat*) *šubartu* only once, at Boğaz Köi, and the references to *mat šubare* do not prove that the Hittites would have used this term. The letter of Hattusilis III is distinguishable from other Akkadian texts found there by its attempt to maintain Babylonian usage, Labat, *L'Akkadien de Boghaz Köi* 8, 38 note 42 ; the letter K Bo. I 22, uses the Syrian geographical terminology known from el Amarna. The omen text which refers to

(*mat*)*Subarti* proves nothing, for it has been shown that these texts are from Babylonian originals. There is nothing to show that the Hittites themselves used the term *subartum* and its cognates. Again, this point must be considered, not neglected.

Ungnad, who had very ingeniously connected certain names in First Dynasty documents which were not Semitic with the population of Mesopotamia proper—(it is much to be wished that the extension of this term to Babylonia and Assyria could be dropped, at least in scientific work, for it is neither correct nor classical)—argued in his book *Subartu* that the " Hurrians," meaning by that term speakers of the " Hurrian " language, are simply the basic population of the land called by the Babylonians *Subartu*. It was never necessary to accept that formulation, or the conclusions which Gelb summarises on pp. 9–10, for those who conceived that the *Hurri* were one of many elements in Mesopotamia proper and also, for a limited period, east of Tigris, who could, with the other elements also, be called *šubarū*, " of Subartu," by the Babylonians. This view need not imply that all the persons called *šubarū* or by the gentilic *šubaraiu*, spoke the language of the *Hurri* or bore a name derived from that language.

Dr. Gelb's argument is, that there is an absolute distinction between " Hurrian " and " Subaraean." He writes : " Subarian in my definition represents an ethnic and linguistic unit, hitherto unrecognised, inhabiting extensive mountainous areas stretching from northern Mesopotamia in the west to Elam in the east " (p. 108). " The terms SU^{KI}, $SU.BIR_4^{KI}$ and *ina Šubari* attached to certain Hurrian words in Akkadian syllabaries clearly indicate not that those words are Subarian in a linguistic sense, but merely that they were current in the land of Subartu " (p. 19). His study is based primarily on names, principally on personal names, of the time of the Third Dynasty of Ur and the First Dynasty of Babylon (pp. 20–22, 110–115). In order to construct the " ethnic and linguistic unit " into an element in the political history of early Western Asia he examines

the many occurrences of *subartu* and *šubaru* from the earliest to the latest times (pp. 23–49).

Those who have only a general idea of modern onomastic studies in other branches of learning are aware of the many problems such studies present. Names have their own peculiarities, and older generations would have been surprised and extremely sceptical about the confidence with which this material has recently been treated. Dr. Gelb has assembled the names of individuals labelled by the differing terms *lú* SU^{KI}, *lú* SU.A^{KI}, *Šubarū*, finds that of twenty-eight so labelled none are "Hurrian," and only three are Akkadian. "If the rest of the names are neither Hurrian nor Semitic, then what are they? The answer is clear and simple: they are Subarian" (p. 108). One would have thought that the answer might be: there is no proof that names borne by persons called "Subaraean" belong to one language at all. When a group of names ending in *-at -it -ut* is compared with geographical names ending in *-hat* (p. 108), it is necessary to point out that the evidence is in favour of *-ha-d(i)* for these names, and that the *-ad*, *-id*, *-ud* of geographical names in Cappadocian texts more probably represents an assimilation of *-n-* from "Hittite" forms ending in *-anda* than the reverse.

Dr. Gelb makes some surprising statements about the language of the *Hurri*. "The ending *-e* attached to a verbal form ending in *ul*" makes "a combination entirely unknown and I believe impossible in the Hurrian language. . . . Evidently neither the pre-Sargonic *ki-ku-li* nor the Mittannian *ki-ik-ku-li* is Hurrian." This is a manifestly incorrect statement, see Speiser, *Introduction to Hurrian*, p. 154, § 189 b. I do not know whether verbal forms were used as names but, if the reading of the name of a PA.TE.SI (*ensi?*) of Subartu as *Zi-gu-um-e* is correct (p. 105), then it could be explained as a verbal form, Speiser, *ibid.* p. 128, § 172. Dr. Gelb says: "Though the root *zik* occurs frequently at Nuzi . . . it is uncertain whether it is Hurrian." That is true; but it is also uncertain that it is not. In this connection the opponent of Naram-Sin, *Hurša-matki*, ruler of Aram and Am,

certainly in northern Syria near the Euphrates, should have been mentioned, for as to the character of that name there can be no doubt whatever.

The examination of the term *Subartu* is divided into two parts, Chapter III and Appendix I. It would have been better to start with the appendix, which amounts to this. GI_6-IR (Gelb reads *mi-ir*) can mean *Subartum* or *Ešnunak* (note the retention of the correct grammatical form). SU.GÎR^{KI} or SA.GÎR^{KI} can be either *Subartum* or *Elamtum* but ḪU.BU.UR^{KI} and SU.BIR$_4^{KI}$ can only mean *Subartum*. Similarly IGI.NIN^{KI} can be either *Elamtum* or *Yamutbalum* and in texts NIM.MA^{KI} is always *Elamtum*. It seems obvious that the terminology of the " ideograms " has nothing to do with the Akkadian terms, but is based on geographical description. The Sumerian word *hubur* means "low," *šaplu*, and HU.BU.UR^{KI} should, if the scribe were translating literally be *irsitu šaplitu*, low land. NIM.MA^{KI} is clear enough, " high land." But not all Elam was high land. Susiana includes the foot-hills in front of the highland plateau, from the west, IGI.NIM^{KI} and that is also true of *Yamutbalum*, the territory round *Der*, Badrah ; the basis of this terminology must not be neglected.

Once that is recognised, it is apparent that GI_6.IR, which is simply a syllabic variant from GÎR, must describe some characteristic of ground found both in *Subartum* and *Ešnunnak* and that PAP. (not *nu*) ḪA.DU is simply another way of expressing the same characteristic : " where one can go in any direction," motion being the common element in GÎR and DU. In that way SU.GÎR can be applied to both *Subartum* and *Elamtum* ; in both those lands there were plains where one could go anywhere, and *Ešnunak* as those who have lost themselves looking for the many tells east of the Diyalah can testify, shares that characteristic. The first element of the " ideogram " SU must, then, mean in this connection something like " plain," and the alternation SU, SA may mean that it is not Sumerian at all, but a foreign word about equivalent to *hubur* in meaning. There should be little doubt about why SU.BIR^{KI} can mean only

Subartum and is never *Elamtum* ; the ideogram must denote a plain which is *edinu* BIR_4. the water plain, the land of the god ENGAR, *irrišum*. Similarly SU.A is simply a description.

The translation of SU.BAR by *elātum* in II R pl. 30, lines 20, 22, would only contradict this analysis if it were true that *elātum* in this connection means " highlands," which Gelb says means " any area situated at a higher altitude, either up-river or in the mountains." But the verb *ēlū* means, among other things, " to go up north " as well as " to ascend," as in all Semitic languages, and *tawirtum*, *elitum* or the like, *e.g.* Schoor, *Urkunden* No. 95, 3, means " northern " so and so ; the only watered plains the Babylonians knew, as against the marshes of Sumer or the land of canals, Akkad, was to the north. SU.BAR and the ideogram Gelb transliterates ŠUBUR, but which in this sense should probably be SUBAR, can simply mean " slave " or " servant " simply because the plainsmen who were near neighbours of the Babylonians provided the main body of that class.

Dr. Gelb says : " From the pre-Sargonic period we come in contact with Subarians living north of Babylonia, chiefly in the mountains east of Tigris " (p. 84). This statement is based on lists of lands conquered and named by kings or other rulers. Thus *Lugal-anni-mundu* mentions tribute from the rulers of " the Cedar Mountain (not mountains, as Gelb says), *Elamtu*, *Marhaši*, *Gutium*, *Subartum*, *Amurru Sutium*. Such a list proves nothing about geography. The mention of *Subartu* between *Gutium* and *Amurru* no more proves that *Subartu* stretched from Gutium to *Amurru* than the position of *Amurru* proves that it lay between *Subartu* and *Sutium*, Palmyrene, or that *Elamtu* lay between the " Cedar Mountain " and *Marhaši*. The same observation applies to many other cases, *e.g.* Eannatum, where everything said is at present beyond explanation. In the Naram-Sin inscription copied in the Larsa period just before Hammurabi—Gelb's description as " late Ur " is a mere contradiction of known facts (p. 35)—" all *Subartum* up to

the Cedar Forest" cannot mean any "Cedar Forest" on the Iranian plateau for the clear reason that there can have been no cedar forest in any part of the lands to which Naram-Sin went there; he went no further into the mountains than the Qara Dagh, and there were never cedar forests in those parts. The curious point about Dr. Gelb's argument is that on occasion he insists that coupling of geographical names does not mean that the lands adjoin, p. 103, where he misreads the name Rid-Adad because he has not recognised, as the copyist was forced by autopsy to do, that the sign he reads *iš* is really *id* with some wedges closed up, a frequent phenomenon, demonstrated in this case by quite clear signs, all *id*, elsewhere in the same inscription. Arad-Nannar's dedication mentions a governor of Subartu and the land of Karda, *kar-da*^{KI}*-ka* (p. 38), not "Kardak," a grammatical error; and this Karda is frequently mentioned in the letters from Ma'er; it is in the plain north of Ma'er. When Ishbi-Irra fought men of SU^{KI} and NIM^{KI} he was protecting his city Ma'er in the north and Isin in the south; there is nothing that suggests a location east of Tigris in that. Jean, *Lettres de Mari* II, No. 81, shows that Subartu is northwards, nothing else. The "Synchronous History" places *Subartu* between the lower Zab and Babylonia; all plain. Tukulti-Enurta I conquered *Papahi*, *Kummuhi*, *Bušše*, *Mummi*, *Alzi*, *Madani*, *Nihani*, *Alaia*, *Teburzi*, *Purulumzi* "all the wide land of *šubare*." Dr. Gelb remarks (p. 46): "If Mittanni-Hanigalbat is situated in Mesopotamia, the land of the Subarians in the time of Tukulti-Ninurta I has to be located elsewhere," and apparently adopts Forrer's view that these lands lie "between the Taurus range and the upper Tigris." The situation of *Kummuhi* was long ago settled by the inscriptions of Sennacherib on the main peak of the Judi Dagh found by L. W. King; as that mountain, called *Nipur* by the Assyrians, was the border of *Kummuhi* that land must be the river valley to the west of the range. The idea that the Assyrian kings of the second millennium reached the northern sources of the Tigris has little to do with history.

Dr. Gelb tries to interpret " the land of the *subare* " in the Amarna letters (No. 100, 21 ; No. 109, 40 ; and possibly No. 108, 17), as referring to " a political unit independent of Assyria, situated somewhere between the Taurus Range and the Upper Tigris (pp. 48–9), on the ground that " the reasons for the identification (with Mitanni) are not apparent in any of the texts." What is clear in No. 100 is that the inhabitants of Irqata are claiming to have done something requested by the Pharaoh, and do not deserve to be in bad repute ; what they did was, to deliver some present with horses and chariots to *mat subare*. The Pharaoh was allied to the king of Mitanni, and it is known that the Egyptians exchanged presents with Dushratta. Mitanni was a land of river valleys. The various parts of Western Asia so called always are ; there is not the slightest reason to believe in any political unit covering all the parts so called. It so happens that because Mitanni was a plain, the Syrians called it *mat Subare* while the Hittites and Egyptians use what is very probably the " Hurrian " name.

That is the point of the alphabetic inscription from Rās esh Shamra, which Dr. Gelb spells Ra's Shamrah as if the aleph were pronounced. As this text, Syria X, pl. LXII, has obviously much influenced Dr. Gelb, pp. 20–21, 49, it may be as well to point out that *šbr* (or *ṯbr*, as some write) cannot be an ethnic, but only a land-name, as is *Qṭś*. The forms *Ddmy*, *Hry*, *Hty*, *Alšy* must equally be land-names with a vocalic (gentilic) ending, and such an ending in the case of *Hry* and *Hty* was to be expected, from writings in other scripts, despite Burchardt. It is clear that this list is a list of states, and that *šbr* or *ṯbr* means some land of about the same rank as *mat Hurre*, *mat Hatti* and *Alašia*. If this *šbr* is really *subartu* or *mat šubare*, then this *mat šubare* can only be a Syrian name for Mitanni, as in the Amarna letters. The text belongs to the time of *Suppiluliuma* when *mat Hurri* and (*mat*) *Mitanni* were distinct political units. When we speak of " the Lowlands " we often mean southern Scotland. But " the lowlands " are not always Scotland, and each occurrence has to be judged by itself. When Shutarna II

was king of Mitanni he was also overlord of the *Hurri* states ; the Syrians called him king of the *Hurri*, and in that case *Hurri* and *Mitanni* can be used indifferently.

Dr. Gelb thinks that the *Hurri* came from the east, first came into contact with Babylonia in the time of the Agade dynasty, and began " their peaceful penetration into Babylonia " in the Ur III period. " In the Hammurabi period they are crossing the Tigris and moving into northern Mesopotamia and northern Syria and to some extent into Babylonia." During a time of unrest " the Hurrians forced their way into vast territories extending southward from Lake Van and including Assyria and Mesopotamia and much of Syria. . . . It is probable that the Hurrian migrations were indirectly responsible for the invasions of the Hyksos into Egypt and of the Kassites into Babylonia. . . After about 1500 B.C. our sources begin to be more eloquent. Although Hurrian remnants are found scattered through the whole Near East, the Hurrian state of Mitanni is restricted to Mesopotamia, at times controlling some territories in Assyria and North Syria." Yet on pp. 51 and 69 it seems to be admitted that the Biblical Horites are the same people, and they were resident in Edom at a very early period, if the tradition in Genesis is to be used at all.

There are cuneiform texts in the " Hurrian " language belonging to the time of Zimri-Lim of Ma'er, about 1770–60, or eighty years later. Assyria was ruled by strong kings between the time of Sargon I of Assyria and Shamshi-Adad I. The Hittite translations of " Hurrian " texts point clearly to an extensive literature in that language which cannot well be later than the fifteenth century, and may be older. Also by the fifteenth century there was a distinction in speech between *Hurri* in the west and *Hurri* in the east, and apparently different calendars were used. All this points to long settlement. Whether the Biblical Horites and the land called by the Egyptians *Kharu* derive from the same people or not I do not know. The historical puzzles are endless. But I do not believe in the theory of a great folk migration in the Hammurabi period, or just before it, or just after it,

so far as the *Hurri* are concerned. And the evidence should prove that there were some *Hurri* rulers in Syria in the time of Naram-Sin.

There are some curious errors in this essay. On p. 63, (*il*)*Dagan ša harri* is corrected to *ša Hurri* ; it is certain that *ša harri* is parallel to the appellation (*d*)*Nabu ša harie.* On p. 5 the site of *Nuzu* is said to have been discovered in 1925 ; it was known to Dr. Corner and Miss Bell in early 1924.

THE REPHAIM

By Rev. John Gray, M.A., B.D.

One of the more obscure elements in the Old Testament which now may be elucidated in the light of the Ras Shamra material is the Rephaim.

The term is already familiar in the place-name, the Plain of the Rephaim[1] which is identified with the Biq'a to the South-West of modern Jerusalem in the vicinity of the railway station. There is, of course, nothing in this usage to suggest that persons rather than inanimate objects such as plants or geological features are denoted. Elsewhere in the OT, however, the term quite clearly denotes persons. The Rephaim are found named with the Zuzim[2] (Zamzummim?) and the Emim as the victims of the raid of Chedorlaomer and his confederates in Transjordan described in Genesis xiv. This passage, however, is known from of old as an enigma. It has been ably contended[3] that the passage was written and drafted into the patriarchal tradition perhaps in the time of David to authenticate his occupation of Jerusalem as the political and religious capital of the Hebrew Kingdom and the adoption of the local cult and priesthood of the place. Moreover, there are undeniable Midrashic traces in the passage, notably in the proper names. Recently Glueck[4] has endeavoured to rehabilitate the passage as sober history as the result of his discovery that the Early Bronze culture of Transjordan was brought to a summary end about the end of the third millennium

[1] II Sam. v, 18, etc., I Chron. xi, 15.

[2] Genesis, xiv, 5.

[3] H. S. Nyberg ; Studien zum Religionskampf im Alten Testament, A.R.W., XXXV, 1938, pp. 329–387, H. H. Rowley ; Zadok and Nehushtan, J.B.L., LVIII, 1939, pp. 123 ff. G. Widengren ; Psalm 110 och det Sakrala Kungadomet i Israel, Uppsala Universitets Aarsskrift, 1941, pp. 21–22.

[4] N. Glueck ; The Other Side of the Jordan, 1940, pp. 15 ff.

or the beginning of the second but, however true this may be, it does not authenticate the tradition of Genesis xiv in every detail, and the identity of the kings must still remain uncertain. In this milieu the Rephaim are no more definite than the Emim, 'the Terrors', and the Zamzummim, 'the Babblers'.

In Genesis xv, 20–21, the Rephaim are listed with the Hittites, Perizzites, Amorites, Canaanites, Girgashites and Jebusites as the pre-Israelite inhabitants of Palestine. The Targum Onkelos, however, still treats the term as a general rather than as a particular ethnic one, rendering it גִּבָּרַיָּא, "giants," and the LXX generally follows this rule rendering Rephaim as γιγαντες or τιτανες, thus clearly relegating the Rephaim from the realm of history to that of legend. In the Prophetic books and the Wisdom Literature the term is used as a synonym for the dead, this usage being paralleled in Phoenician funerary inscriptions of the 4th and 5th centuries.[1] The LXX which renders Rephaim here variously as γιγαντες and γηγενεις seems to perpetuate the tradition of a departed race of supermen which is re-echoed in Philo of Byblos.[2] We should be thus warned at the outset against investing the Rephaim with a particular historical significance.

Virolleaud claims to have found a point of contact between the Scriptural tradition of the Rephaim and the ancient Canaanite milieu which has already been so amply elucidated by excavation in Syria and Palestine and particularly from the Ras Shamra texts. In III Krt published by Virolleaud in 1941[3], in the promise of El to Krt of the progeny he desires, one is designated "tall among the *rp'e* of the land." Virolleaud presumes that we have here the familiar OT tradition of a race of departed supermen and would regard the Rephaim-*rp'e* as the indigenous population of the land. The passage is not in a good state of preservation though it may be fairly certainly restored from a parallel

[1] G. A. Cooke ; North Semitic Inscriptions, pp. 26 ff., 30 ff.
[2] Eusebius ; Praeparatio Evangelica, I, 34 d, ed. Gifford, 1903.
[3] Virolleaud ; Syria, XXII, 1941, pp. 1–30.

passage. The singular *rp'e* is noteworthy in this case, Virolleaud's interpretation demanding that it be taken as a collective which is quite possible. Ginsberg[1], on the other hand, takes *rp'e* as a common noun, " community " from a root *rp'* of which he thinks the primary sense, as in Arabic,[2] is " to join." This meaning is demanded by the parallelism, *rp'e* corresponding to *qbṣ*, " a gathering."[3]

The main evidence from Ras Shamra comes in the form of three fragments found in the campaign at Ras Shamra in 1930 but not published until 1941.[4] These are the subject of a monograph by Virolleaud published the previous year[5]. Here Virolleaud admits the difficulty of this subject complicated by fragmentary texts, nevertheless, he goes on to draw certain conclusions in line with his historical interpretation of the Ras Shamra texts which the evidence does not certainly support.

The texts are certainly not well preserved, as may be noted at a glance from Gordon's publication[6]. In the first text the first half of the opening ten lines is wanting, and we are left to guess at the contents by certain words from the end of the lines. Here we note the words *tdbḥn* (they) " ye shall sacrifice " *tlḥmn* (they) " ye shall eat ; *štyn*, (they) " ye shall drink " and the word *qẓ* which may refer either to summer or summer fruit.

[1] H. L. Ginsberg ; Legend of King Keret. . . . BASOR, supplement 2–3, 1941, pp. 23, 41. The text is *btk rp'e 'arṣ* Amidst the community of the land, *bphr qbṣ dtn* In the number of the population of the realm.

[2] The root is found both as a defective رَقَا, and as a hamzate verb, رَقَاءَ, meaning " to darn or mend ".

[3] The Arabic verb قَبَضَ is found of death gathering in its victims, which may be the underlying meaning of *rp'e* too.

[4] Virolleaud ; Les Rephaïm. Fragments de poèmes de Ras Shamra, Syria XXII, 1941, pp. 1–30. He designates the fragments of Rp I, Rp II and Rp III.

[5] Virolleaud ; Les Rephaïm, Revue des Études Sémitiques, 1940, pp. 77–83.

[6] C. H. Gordon ; Ugaritic Handbook, 1947, Rp I = Gordon 121.

The second column of the first tablet is more fully preserved but still not complete. Here we are introduced to the *rp'um* who yoke their horses and chariots and after a three-days' journey[1] reach the threshing-floors and plantations[2]. There they are addressed by Dn'el, who is the same figure as in the four-tablet text published by Virolleaud as "La Légende phénicienne de Dan'el."[2] In the present text he is designated *mt hrnmy*, and it is probable that the other stock title *mt rp'e* should be restored after *dn'el* in a lacuna in col. ii, 1, 7. In the beginning of this column there is a reference to "eight within my temple,"[3] which might apply most naturally to *rp'um* since there is no obvious change in the subject of the verbs throughout the passage. This if it could be established would be of great significance since if the *rp'um* were eight in number they cannot be regarded as an ethnic element nor yet as the indefinite number of the dead as they are alternatively treated in the OT.

The next text, Rp II (= Gordon 122) is almost as fragmentary as the first column of Rp I and like it wants the first half of all the lines. The language links it beyond all doubt with Rp I and one notes the close association of the *rp'um* with the shrine, *hkl//'atṛ* (ll.3–4). Here the term *'elnym* is found in parallel to *rp'um* (ll.3–4 and probably ll.11–12) who are addressed by one who, as far as it is

[1] This may be rather symbolical than literal, obviously a cultic journey.

[2] Gordon, 121, II, 3 *'asr sswm tsmd d* (. . . .)
t'ln lmrkbthm t'e (*ty* . . .)
tlkn ym wṭn
'aḥr šd(*pšm* . . .)
mgy rp'um lgrnt (. . . .)
mṭ't. . . .

"They yoke the horses, they bind (. . . .)
They go up into their chariots, they (?)
They go a day and two,
The next day at sunrise
The *rp'um* reached the threshing-floors
. . . . the plantations . . ."

[3] Gordon ; 121, II, 1, *ṭmn bqrb hkly*

possible to judge from a damaged text, is designated *'el mrz'y* (l.1 and possibly l.5).

The same theme is continued in almost the same language in the next text Rp III A (= Gordon 123) where there is mention of *'rhm*, " their city, or citadel " (l.24). In this text Virolleaud would see a reference to the enthronement of Ba'al in ll.14–18 where we read

ym lm qd (. . . .)
šmn prs (. . . .)
ydr hm ym (. . . .)
'l 'amr y'u (. . . .)
nḫt kḫṯ d (. . . .)

This passage is restored by Virolleaud, who reads

'elnym lm qd (*qd 'al'eyn b'l*)
šmn prst (. . . .)
hm ymlk b'l 'l 'amr
y'u (*ḫd ks'a mlkh*)
nḫt kḫṯ d (*rkth*).

He translates the passage thus restored as follows :—

" Versez sur le crâne (de Baal) de l'huile. . . .
Alors Baal sera consacré ;
Il montera sur (la montagne d') Amr (Amurru) ;
Et là, il prendra possession du siège de la souveraineté."[1]

Here Virolleaud's restoration is quite possible, though it is regrettably uncertain owing to the fact that in this case there is no parallel passage in any other text such as often assists us in such reconstructions.

The second column of the third text, Rp III B (= Gordon, 124), is well preserved except for the first and the last three lines, but there are many strange words which have hitherto defied satisfactory translation. The body of the text, however, deals with a seven-day feast. Here we may note the passage ll.12–15 describing the beasts slain for the feast. The same menu is found in II AB, col. vi, 40–43 (Gordon, 51)[2] which significantly enough is a description of the " house-

[1] Virolleaud ; Les Rephaïm, RES, 1940, p. 80.

[2] Virolleaud ; Un nouveaux chant du poème d'Al'eyn Baal, Syria, XIII, 1932, pp. 113-163.

warming" for 'Al'eyn Ba'al restored to his royal house and dignity. That Rp III is related to the AB cycle is apparent from the mention of 'Al'eyn Ba'al in l.26 where, however, the text is fragmentary and the name appears in isolation.

Of the *Rp'um* we learn from the text that they were few in number, probably eight comprising seven and one singled out by name, according to Virolleaud, as *rp'u b'l* who may have been the chief of the group. Virolleaud compares the name and the status of this figure with that of Raphael in the Book of Tobit[1], one of the holy angels who stand as intercessors before the Holy Presence, his specific mission being healing. The *rp'um* of the texts are taken by Virolleaud to be "the healers" or, as he prefers it, "the healed ones." Dussaud, on the other hand, would take the verb in the active sense.[2] He would read *rp'u B'l* as "Rp'u the son of Ba'al." The analogous proper names cited by Dussaud such as Raphael just mentioned and Shadrapha from Palmyra, however, suggest that *rp'u b'l* means either "Ba'al heals" or even "the healer of Ba'al." This, however, is still hypothetical since the relation of *rp'u b'l* to the *rp'um* is not at all clear.

In none of the fragments cited by Virolleaud do we find any epithet directly qualifying *rp'um* by which we might determine their nature more precisely. We do find, however, that they are closely associated with the temple, *hkl*//*'aṯr*. This, however, is the shrine not of the *rp'um* but of a deity who is designated by the pronominal suffixes to *hkl* and *'aṯr* as singular and there is no passage where we might read any reference to the shrine of the *rp'um* or to any cult of which they are the object. They are themselves under command possibly of one *mrz'y* for which *rp'u b'l* may be a synonym. So far we may say that in function if not in nature the *rp'um* are in the orbit of divinity which is borne out by the specific rôle they play in the threshing-floors and the plantations and, if we accept Virolleaud's

[1] Tobit, xii, 15.

[2] Dussaud ; Les Découvertes de Ras Shamra . . . 2nd ed., 1941, p. 185.

restoration of Rp III A, ll.14–18, in the anointing and enthronement of 'Al'eyn Ba'al.[1]

As we search the texts for parallels to *rp'um* we find that the most common is *'elnym*. Virolleaud suggests that this may be an ethnic title[2] but he goes on to elaborate the theory that the term may be derived from אֵלוֹן familiar as the sacred terebinth at sundry holy places, an interpretation which Dussaud also considers.[3] Virolleaud recollects that there was such a tree at Shechem where, according to Hebrew tradition, Jacob buried the strange gods or idols of his people when they left Shechem.[4] He suggests the translation of *'elnym* as " they of the oracle-terebinth." In the text, however, there is no suggestion of the oracular activity of the *rp'um*. Nor are they confined to any one spot such as that occupied by a sacred terebinth, but are actually very mobile, harnessing their carriages and journeying three days[5] to the threshing-floors and plantations. It would seem at first sight more natural to take *'elnym* as Dussaud does in the sense of " gods " which is, in fact, well attested in later Phoenician inscriptions such as that of Yḥw mlk (5th or 4th century) on a stele from Byblos[6] and that of Eshmun'azar of Sidon on his sarcophagus.[7] On the latter the term refers to Astarte (1.16), to Eshmun (1.17) and to Ba'al Sidon (1.18) while in the bilingual inscription of El Amruni we find אלנים רפאים rendered by *diis manibus*. Thus we seem to be left in no doubt as to the significance of *'elnym* as applied to *rp'um* in the three fragments before us.

Again in the address of Dn'el to the *rp'um* in Rp I, col. ii, 9, it is possible to read *'elm* as a vocative in opposition to *rp'um*.

[1] Even if we admit Virolleaud's reconstruction it is not clear what part the *rp'um* played in the enthronement of Ba'al.

[2] Virolleaud ; Les Rephaïm, Rev. des Ét. Sémit., 1940, p. 82.

[3] Dussaud ; Les Découvertes, 2nd ed., p. 185. He suggests a connection with the town " Eylon " (Aijalon ?).

[4] Genesis xxxv, 4.

[5] Not necessarily to be taken literally.

[6] G. A. Cooke ; N.S.I., 3, p. 18 ff.

[7] *ibidem* 5, pp. 30 ff.

Here, however, the text is damaged and the suggestion must be made with reserve. So taken this passage might seem to support the view that the *rp'um* were divine. In a certain late Phoenician text of an inscription from Ma'sub,[1] however, *'elnym* is found applied to the envoys, מַלְאָכִים, of the goddess Mlk-Astarte, who with the citizens of Ḥammon erected a portico to the goddess. This term, which obviously refers to human agents, is taken by Cooke in the sense of "leaders" or "chiefs" in connection with which he cites the use of אֵילֵי מוֹאָב in parallel to אַלְפֵי אֱדוֹם in Exodus xv, 15 and applied to rulers in Ezekiel xvii, 3, to which we may add the phrase אֵילֵי הָאָרֶץ from II Kings xxiv, 15, referring to those singled out for deportation with the royal family of Judah. Thus while *'elm* in the text of Rp I might refer to "gods," it is not certain that it does refer to *rp'um*. Indeed, even if it did it is still open to connect *'elm* with a root אול, cf. Arabic اول, and relate it specifically to the Accadian *awîlu* which is used in administrative documents from Mesopotamia to denote citizens of the first rank after the king.

The association of the *rp'um* with Dn'el is most significant. Dn'el's stock epithet is *mt rp'e* to which *mt hrnmy* is the invariable parallel. On the assumption that *hrnmy* is, as the ending suggests, a gentilic term Virolleaud supposes that *mt rp'e* signifies "the man of the country inhabited or protected by the *rp'um*." The uncertain meaning of *mt hrnmy* however, has involved the title *mt rp'e* in its obscurity. It seems better to take *rp'e* as a passive participle of the *qatîl* type[2] signifying "the man who has been healed," taking healing in the sense of having his potency restored[3] as is described in the text which deals with Dn'el and his son 'Aqht. From this last text it is apparent that Dn'el

[1] G. A. Cooke ; N.S.I., 10, pp. 48 ff., the inscription is dated 222 B.C.

[2] In Ugaritic a long vowel may be expressed with the consonant it precedes, *e.g.* *sdynm* = = Sîdonim, so *rp'e* may express רָפִיא.

[3] The verb is used in this sense in the narrative of Abraham and Sarah at Gerar, Genesis xx, 17.

and 'Aqht, whatever their original status, had reached more than human proportion, the phases of the fertility of the earth fluctuating with their vicissitudes. Hence it is natural that we should place the *rp'um* in the same divine category as *Dn'el mt rp'e*.

On the other hand, there are passages in the texts which suggest that the *rp'um* were not divine but human. Unlike the gods who make their journeys on foot or, as 'Anat in IV AB, on the wing, the *rp'um* harness their horses and chariots and after three days journey—or perhaps three circuits of the district on three successive days—go to the threshing-floors and plantations. The use of horses seems a significant clue to the situation. First of all it suggests the concrete nature of the Rephaim as human agents, and moreover indicates the rank of the *rp'um* since at the early date of the Ras Shamra texts horses were still rare enough to be the property of the wealthy and the warlike.[1] Again when we consider that the horse and chariot were introduced to Syria and Palestine not earlier than the middle of the 18th century we must seriously question the antiquity of the present text and the view of Virolleaud that this and the other legends of Ras Shamra took shape in Palestine, " et cela à une epoque bien plus ancienne que celle où les Hébreux ont pris possession de la Terre Promise."[2]

To the view that the *rp'um* are not divine but human, the most obvious objection is to cite the use of *'elnym* as parallel to *rp'um*. It has already been admitted that *'elnym* is best taken as " divine beings." Here we must insist on the fact that the king was intimately concerned in the ritual to promote the fertility of the land. There is a good deal of evidence that in the ancient East " every king was a Messiah,"[3] particularizing by his enthronement and continuing rule the enthronement of the god of his people and

[1] In I Krt a chariot and three horses are mentioned as a peace-offering of Pbl mlk to Krt, I K, 55–56//127–128//251–252. In the muster of Krt's retinue, I K, 87–91, there is no mention of horses or chariots.

[2] Virolleaud ; Les Rephaïm, RES, 1940, p. 83.

[3] M. Canney ; Ancient Conceptions of Kingship, Oxford, 1934, p. 74.

the order of Cosmos as against Chaos. This aspect of royalty seems to have been especially prominent at seasonal festivals such as that which is apparently indicated in the Rp texts. Thus the term *'elnym* " divine persons," may have been applied to the king of Ugarit in his ritual function and to his associates, who might conceivably be hallowed by his presence, the whole company being termed the *rp'um*, " the healers."

It is here submitted that we have in the *rp'um* the king and seven attendants, possibly the chiefs of clans or wards in the town and realm of Ugarit or, it may be seven priests, in some rite connected with the inspection of corn on the threshing-floors and the permanent plants such as the vines and fruit-trees[1] with a view to the health of the following year's crop. Again the occasion may have been the Ingathering, אָסִיף, when the corn from the threshing-floor and the produce of the vineyard and oliveyard[2] was brought in and stored or pressed. This season was closely associated with the New Year as we may gather from the Gezer Calendar where the month of sowing is noted immediately after the month of ingathering and in the OT the same sequence of threshing, vintage and sowing is noted in Leviticus xxvi, 5. The solemnity of the occasion of ingathering is described by Dalman, who cites an Aramaic

[1] Another possibility is that the visit to the plantations was connected with the repair of terraces before the heavy autumn rains. This may be the interpretation of the passage in S.S., II.10–11, *yšql šdmth km gpn*, " Let them even the plots thereof about (or to suit) the vine."

[2] The olive is the last fruit to be harvested. There is a reference to the olive in Rp. III B, 14–15, *kksp l'brm zt*
hrṣ l'brm kš.
We suggest the following translation :—
" As silver to those who appreciate it is olive oil,
Even gold to such the pollen of the vine."
cf. Arabic عبر " to note mentally."
VIII Form, " to esteem."

An alternative translation might be based on the meaning of the Arabic إعتبارياً of the same root, " relatively ; in point of comparison," the final m being used to amplify the preposition l.

passage adduced by Lidzbarski to indicate that in antiquity the ingathering was in August-September. Thus the visit of the *rp'um* to the threshing-floors and plantations may have been closely associated with the New Year festival where the central event was the enthronement of Ba'al.[1]

The fact that the *rp'um* are comparatively inconspicuous in the records of Ras Shamra may suggest that the rite was not a regular one, but was observed only once in several years to prevent exhaustion of seed or as an apotropaic measure when new seed was brought in or when the crops were impaired through blight, mildew or some such disease when the inspection and selection of seed would be imperative. Such a theory would fittingly account for the title *rp'um*, " the healers " applied to the functionaries. On the other hand we feel bound to associate the ingathering from threshing-floor and plantation with the New Year and the revival and enthronement of 'Al'eyn Ba'al. Indeed the notion of healing may have specific reference to the revival of 'Al'eyn Ba'al and the restoration of the fertility of the land which this symbolized. The verb רפא, as has already been indicated, is found with precisely this significance in connection with the restoration of fertility to Abimelech and his harem in Genesis xx, 17, and the same association seems to have been made by the Phoenicians of a later period in[2] naming the seventh month מרפא. One recollects that it was in the seventh month that the Feast of Tabernacles and the Jewish New Year fell.[3]

[1] G. Dalman ; *Arbeit und Sitte in Palästina* I, 2, 1928, p. 553.

[2] In an inscription from Kition in Cyprus, B.C. 325, S.A. Cooke ; N.S.I. 13, pp. 57 ff.

[3] Leviticus xxiii, 34 ff. The rejoicing and licence associated with this season may have been localized on the threshing-floor as the Book of Ruth indicates. The significance of the threshing-floor in Semitic ritual has been emphasized by the late A. J. Wensinck, who cites such a passage as Hosea ix, 1. . . . " Thou hast gone awhoring from thy God. Thou hast loved the rewards of harlots upon every threshing-floor." Wensinck maintains that here we have the threshing-floor as the scene of ritual prostitution as an element in the agrarian ritual of sympathetic magic. Such rites to promote the process of fertility may have been the object of the visit of the *rp'um* to the threshing-floors.

Our conclusion is that the *rp'um* of the texts we have examined were human agents, cultic functionaries, probably the king and his immediate associates, who were termed *'elnym* " divine beings " in virtue of their function. We know from a passage in the 'Anat text[1] that the cult of the dead was intimately bound up with provisions for the fertility of the land so that in course of time the *rp'um* as human functionaries may have become confused with the dead who were placated with peace-offerings to promote fertility. This process seems to have been complete by the time of the inscriptions of the 5th–4th centuries. There רפאם definitely signifies the dead in general. The reason for this development may be the urbanization of the Phoenician communities confined to the coastal strip after the Aramaean influx to landward Syria in the latter half of the second millennium and the eventual orientation of the Phoenician cities westwards to the sea. The vagueness which surrounds the *rp'um* in the Ras Shamra texts may be due to the fact that at the time when the texts were copied and collected[1] the ritual indicated in the Rp texts was obsolescent if not obsolete. This could quite well happen in such a time as the Hyksos invasion involving as it did a considerable upheaval in Ugaritic life, affecting both race and constitution, to say nothing of the change or perhaps even changes of dynasty. In those circumstances such ritual and myth as centred about the person of the king and his notables might well become obsolete, and it is submitted that this is what

[1] Gordon ; 'nt, col. iii, 12–16//col. iv, 53–55.

št b'prm ddym
sk šlm lkbd 'ars
'arb dd lkbd šdm
hšk 'sk 'bsk 'my
'arb dd (for *'arbdd* which is generally read I take *'arb* as an Aphel imperative of *rbh.*)
" Place in the dust pots,
Pour a peace-offering into the heart of the earth,
Set many pots in the field,
Thine enclosure, thy trees, thy fallow ground is with me "

has happened at Ras Shamra in the case of the Rp texts and their ritual.

In the OT the reminiscence of the Rephaim is even more vague. The reason is easily determined. If the *rp'um*, as the Ras Shamra texts indicate, according to Virolleaud's reconstruction of Rp III A, were associated with the revival and enthronement of Ba'al, then they were out of commission in orthodox Jahwism which knew no dying and rising god. If they were a guild consisting of the king and his immediate associates, the democratic constitution of the Hebrew invaders from the desert had no king nor any tradition of royal-divine ideology. By the time that David occupied the throne of Jerusalem and Solomon amplified his glory, there was also a Nathan and an Ahijah as custodians of the democratic tradition of Israel and as monitors to the king himself of his relation to Jahweh, God of Israel. So it was that the *rp'um* were for the Hebrews one of the departed races of the land or alternatively " the strengthless heads of the dead."[1]

[1] The Ras Shamra texts emphasize the fact that רפאים of the OT cannot on any account be derived from רפה ; to " relax " but from רפא " to heal."

THE DATE OF THE COVENANT SCROLL

By Solomon A. Birnbaum

From a literary point of view, one of the most important finds amongst the scrolls from the cave near the north end of the Dead Sea is the Covenant Scroll ("Sectarian Document.")

As a preliminary to any attempt at determining when the author composed his work we shall have to establish the date of the script. A detailed comparison with that of other early documents hitherto available will provide us with the *terminus ad quem* for the composition of the text. Our examination is based on the reproduction of column 1, published in BASOR 111 : 10.

It is evident at first glance that the writing belongs to the oldest type of Square script known to us from the scanty relics Egypt and Palestine have until now afforded us. Although we have not sufficient material for differentiating between the alphabets of the two countries in those times we may perhaps assume that if there were differences they were not yet great. Upon the basis of the Jewish documents of either provenance it is clear that the Covenant Scroll (Cov.) cannot possibly have been written earlier than the third century documents preserved from Egypt[1] on the one hand. On the other hand again, it is obviously earlier than the Dura-Europos Fragment[2] of before 256 C.E. Hence we can limit our comparison to the following : the third century Egyptian documents (Eg.), the Tobias Inscription (Tob.)[3] of 183–175 B.C.E., the Gezer Boundary Stones.

[1] BFMA, PSBA 37 : 217. ESE 2 : 243, 3 : 22. Sachau, Aram. Pap., 243. PSBA 29 : 260. REJ 65 : 16.

[2] The Excav. at Dura-Europos, 6 : 417.

[3] Chwolson, Corp. Inscr. Hebr. 1. PJB 16 : 33. JA sér. 6, 10 : 188 ESE 3 : 49. Syria, Public. Princeton Univ. Exped., Div. 3, Sect. A, p. 1. CRA 2 : 1 : 79. RA N.S. 10 : 52.

(Gez.)[1] of 100–63 BCE, the Ossuaries (Oss.)[2] of between the late first century B.C.E. and the first two-thirds of the first century C.E., the Uzziah Plaque (Uz.)[3] of the same period, the Queen Helen Inscription (Hel.)[4] of the second half of the first Christian century.

Abbreviations used in the following notes :—BAMP—*Bull. archéol. du Musée Parent.* BASOR—*Bull. of the Am. Schools of Or. Research.* BBSAJ—*Bull. of the Brit. School of Archaeol. in Jerus.* BFMA—W. F. Albright, *A Biblical Fragment from the Maccabaean Age.* The Nash Papyrus (JBL 56 : 145–76). CRA—*Comptes Rendus, Acad. d. Inscr. et Bell. Lettres.* ESE—*M. Lidzbarski, Ephemeris f. sem. Epigraphik.* HNE—*M. Lidzbarski, Handb. d. nordsem. Epigr.* JA—*Journ. Asiat.* JAOS—*Journ. of the Am. Or. Soc.* JBL—*Journ. of Bibl. Lit.* JPOS—*Journ. of the Pal. Or. Soc.* MPJ—*R. Dussaud, Les monum. palest. et jud., Mus. d. Louvre.* OLZ—*Orientalist. Literaturzeitung.* PEQ—*Pal. Explor. Quart.* PJB—*Pal. jahrb.* PSBA—*Proceed. of the Soc. f. Bibl. Archaeol.* Q—*Qobes haḥebra ha'ibriṭ laḥaqiraṭ 'eres yisra'el wa'attiqoṭeha.* QS—*Quarterly Statement Palestine Exploration Fund.* —RA—*Rev. archéol.* RAO—*Ch. Clermont-Ganneau Rec. d'archéol. or.* RB—*Rev. bibl.* REJ—*Rev. d. ét. juiv.* S—*Syria.*

[1] BFMA CRA 4 : 26 : 686. RB 8 : 109. RAO 3 : 116. QS 1899 : 118. HNE 484. Macalister, Excav. of Gezer, 1 : 37, 3 : pl. 10 f. JPOS 10 : 19.

[2] BFMA. Q 1 : 1 : 57. RA N.S. 25 : 398. RA N.S. 36 : 305. RA sér. 3, 1 : 257. Clermont-Ganneau, Archaeol. Researches in Pal. 1 : 381. RAO 5 : 334. RAO 6 : 211. RAO 8 : 59. MPJ Nos. 16 and 51. S 4 : 241. SBB 1885 : 669. OLZ 15 : 529. Klein, Jued. Pal. Corp. Inscr. JPOS 9 : 100. ESE 1 : 186, 312 ; 2 : 72, 191 ; 3 : 49, 302. HNE 485. Macalister, Excav. of Gezer, 1 : 347, 382. QS 1931 : 171. Q 1 : 2 : 71. BBSAJ 5 : 56. BAMP 1867 : 21. RB 34 : 253. RB 1 : 262. JAOS 28 : 355. ZDPV 4 : 9. JPOS 4 : 171. JPOS 8 : 113. JPOS 9 : 45. JPOS 12 : 25. Sēper hay-yōbel lap-professor S. Krauss, 87. PEQ 69 : 126. Sēper Zikkaron la 'Ašer Gulak we-laš-Šamu'el Klein, 133. RB 11 : 276. RB 1934 : 564. JPOS 9 : 41.

[3] BASOR 44 : 8. T 2 : 295. T 2 : 288. QS 1931 : 217, 1932 ; 106.

[4] BFMA Corp. Inscr. Sem. 156. MPJ No. 28. Longpérier, Mus. Napol. III, Choix des monum. J.A. 6 : 6 : 550.

SBB—*Sitzungsber. d. preuss. Akad. d. Wiss.* T—*Tarbis.* ZDPV—*Zeitschr. d. deutsch. Pal. vereins.*

Aleph : The left hand stroke is straight or curved. It generally starts at the top of the main stroke and extends to the bottom of the line. Such forms are characteristic of Oss. and Uz. but are not to be found in Eg. *Beth :* The top is generally a semi-circle, sometimes a tick with a right or acute angle. The letter thus corresponds to Eg. and Tob., while in Oss. this stroke is formalised into a short initial vertical stroke and a long bar on the ceiling of the line (sometimes the initial stroke is already missing). Here the base is generally produced on the right. In Cov. there is no indication of this trend. *Gimel :* Both strokes are very curved. Curves occur in Oss., and the little upstroke in Gez. may perhaps be a lapidary reflection of a hand-written curve. The left stroke issues from the middle of the right one, as in Oss. and some of Eg. There is no trace of that other Eg. form, where the left stroke issues from the top of the right one. *Daleth :* The left side of the top part is a narrow tick, the horizontal stroke of which generally joins the main vertical well beneath the line ceiling. This corresponds to the narrow curve in Eg. In Oss. and Uz., however, the letter is very wide, and the tick has become a top bar. *Hê :* The right hand vertical starts above the line ceiling. The horizontal is slightly wavy ; from its middle, or a little more to the left, issues the left vertical. This form corresponds on the whole to Tob. In Eg. the left downstroke is still slanting and issues from the right hand top corner. In Oss. and Hel. forms similar to Cov. can still be found but even in these the left vertical is more to the left. In other forms it has moved to left end of the new, formalised top bar which has swallowed up the top of the right vertical. In some Ossuaries, in three times out of five in Uz., and in Hel., the left stroke is severed from the top bar. *Waw :* The top is an acute angle or a small and narrow curve as in Oss. and Uz., while Tob. has a right angle and a long top stroke corresponding to the identical angle and the wide top curve of Eg. *Zayin*, as in

Eg., is a plain vertical of line height, while in Gez. and Oss. a small top stroke is added, slanting from right to left and joining the vertical either at the top or near the top ; in Uz. this is formalised with the effect that the letter has become a symmetrical counterpart of Waw. *Heth :* The downstrokes are as a rule somewhat curved. The cross stroke—under the ceiling of the line—is generally horizontal; occasionally, however, one of its ends slants up to the top, as in Eg. In Oss. the cross bar is always horizontal. On some Ossuaries and in Uz. the top has been formalised, the cross bar having become a top bar. *Teth* looks like a medium wide figure 6, except that it is generally open. But it is not written in one go : both the right and left hand strokes are written downwards and meet at a very acute angle. Cov. tallies with Eg. and Tob. It is very unlike Oss. and Uz., where a base has developed. The letter is wide, the left stroke has become straight and tends to decrease in size until it has finally reached only line height. *Yodh* is long, often of line height. The top is an acute angle, the right hand stroke is as a rule longer than the other, slanting towards the right. It differs from Waw not in size but in the pronounced width or angularity of the top, and generally, the straightness of the downstroke. It resembles Eg. rather than Oss. and Uz., where Yodh is on the whole smaller and the right hand stroke a vertical. *Kaph :* The top is a narrow curve or tick. The downstroke is straight, curved or wavy, turning at right angles—occasionally at obtuse angles—to the left, to form a base of equal or slightly greater width than the top part. The base is somewhat under the line bottom, at times considerably lower. This narrow form is used in Eg. In Oss., Uz. and Hel. the formalisation of the letter to line height has caused it to acquire greater width. In Uz. the top bar is in addition formalised. There is no Final Kaph but it appears that at the end of a word the shortened form is not employed. In Uz. the final form consists of a formalised top bar and a long vertical downstroke. *Lamedh* is in two distinct parts, an upper and a lower one. The first is a

very tall stroke, slightly slanting or nearly vertical, beginning with a small or biggish upstroke or loop and sometimes extending a little below the line ceiling. The lower part is a slightly curved downstroke, which sometimes does not reach the line bottom. In Eg. the letter is a wavy line, the parts gradually curving into each other. A kind of two part letter is, however, also beginning to make its appearance. The type of Cov. is like that of Oss., Uz. and Hel. *Mem:* The top part is a narrow, deep curve or tick, corresponding to the wide, wavy top stroke of the fifth century in Egypt and the intermediate form of Eg. The right hand top corner of the letter which is round in Eg. is sharply pointed in Cov. This tallies with Gez., Oss., Uz. and Hel. The left hand downstroke which in Eg. crosses the top, in Sec. issues from it, starting as a rule from the lowest point of the top part. It often slants down to rather near the line bottom. In these respects, too, Mem tallies with Gez., Uz., Hel. and the majority of Oss. The right hand downstroke—mostly straight, occasionally curved or wavy—slants to the right, turning at acute angles to the left at the line bottom, to form a horizontal base of medium or considerable length. There is no base in Eg. In Gez., Oss., Uz. and Hel. the base is well developed and wide. *Final Mem:* The top and right hand parts are identical with those of Mem, but the left hand downstroke reaches the base, either by being vertical or by turning vertical half way. Both forms occur in Oss., while Uz. has only the rectangle. When the left stroke starts near the right hand top corner, the letter is rather like a triangle in shape. Such forms and even wholly triangular ones are to be met with in Oss. The letter extends considerably below the line bottom. There is nothing resembling the severance of the left hand downstroke from the top bar such as we find in Uz. Occasionally in Cov. the downstroke even passes through the top stroke. *Nûn* consists of a vertical curve which, at the line bottom, turns to the left to form a short or medium long base. The two parts correspond to the upper and lower parts of the original wavy line of Eg. The development of

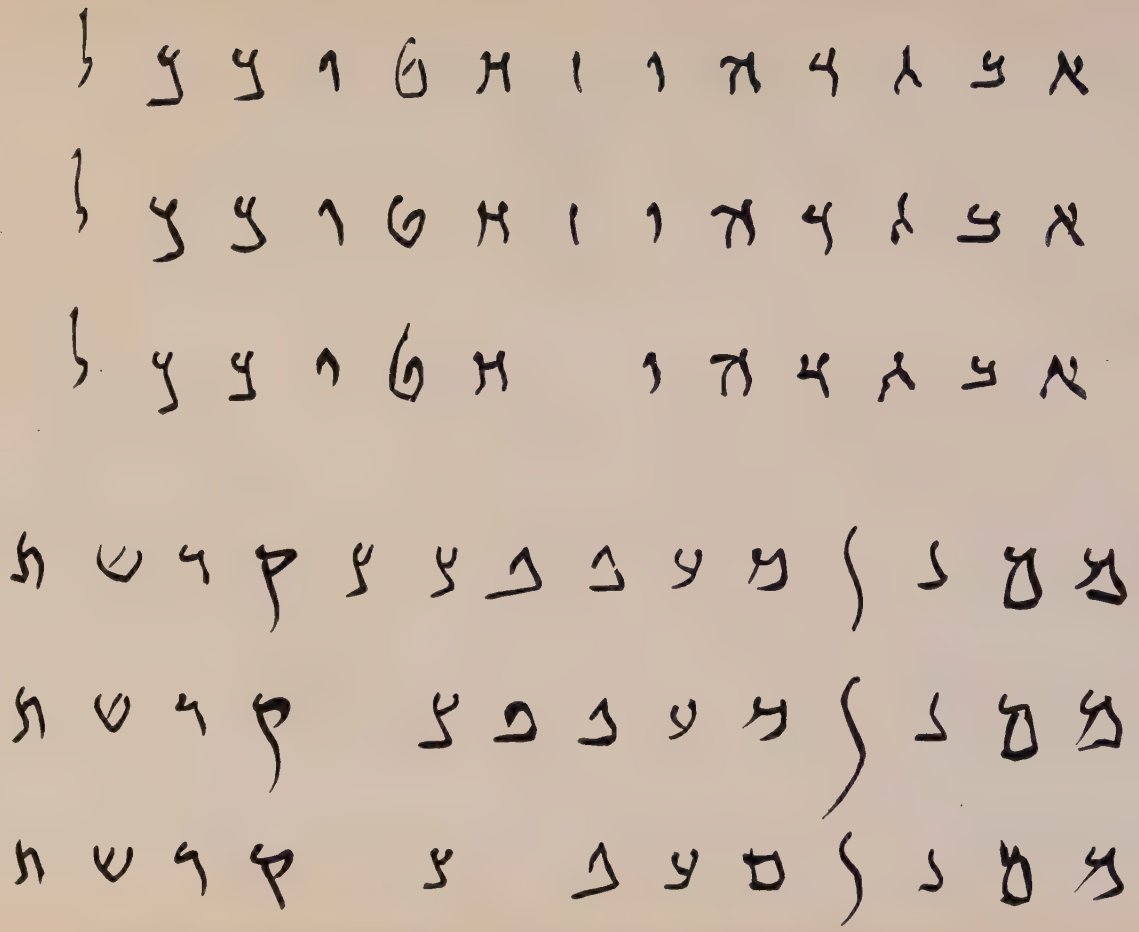
the base on the line bottom reduces the letter to line height. Thus Nûn tallies with Oss. but in Cov. there are no forms with a straight top stroke like those which are sometimes to be met with in Oss. *Final Nûn* has the same long, wavy form as in Eg. and Oss. *Samekh:* The top is a curve from whose right end a vertical goes forth. Occasionally this downstroke does not continue vertical up to the line bottom but starts slanting to the left about half way down. On reaching the line bottom, it turns at right angles towards the left to form a base. From the left part of the top curve a stroke slants to the left, stopping at various distances from the line bottom. The letter corresponds to the somewhat less developed form of Eg.[1] *Ayin:* The right hand stroke is a rather deep curve of line height, met on the left, half way, by a smaller curve. In Eg. the strokes are of equal size. In Oss. and Uz. the Cov. type is frequent, but there is a tendency towards prolongation of the right hand stroke beneath the line bottom; sometimes it extends considerably beneath it. *Pe:* From a point on the line ceiling a small stroke slants to the left and a downstroke to the right. On reaching the line bottom it turns leftwards in the shape of a horizontal—exceptionally, slightly slanting—base. In Eg. the base is not yet developed and there is no specimen with a right or acute angle at the bottom. In Cov. we have the Oss. form. The left hand stroke is occasionally broken, corresponding to the curve in Uz. There is no Final Pe. *Sadhe:* The more or less straight downstroke is slanting, and turns, at the line bottom, towards the left, to form a slanting, occasionally horizontal, medium-sized base. In its upper half the downstroke is met on the right by a large curve or tick. The letter corresponds to Eg., Oss. and Hel., but in Eg. it extends further down. In col. 1 no Sadhe occurs at the end of a word, so that, at present, we do not know whether there was a Final Sadhe. *Qoph:* A horizontal top stroke or one slanting slightly upwards, starts with a small curve or straight downstroke, turns downwards and

[1] The specimens which have a closed form have been re-inked by a later hand.

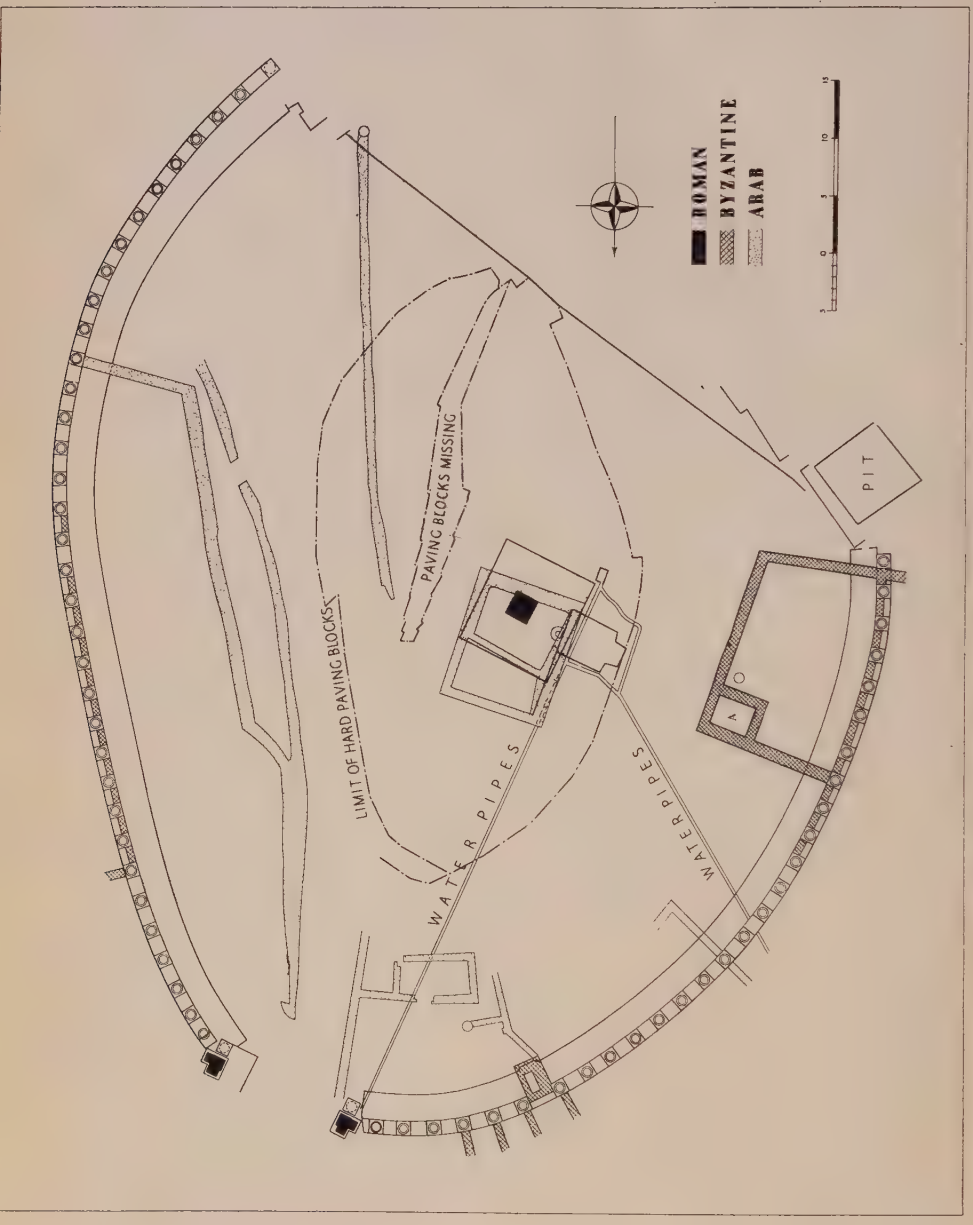
bends to the left again until it meets the left hand shaft, thus forming a triangular outline. The shaft, slanting slightly to the right, extends—more or less straight, or else becoming a very shallow curve—far beneath the line. This closed form is to be found in Eg. as well as in Oss. There is in Cov. no trace of the open form, already making its appearance in Oss., with the vertical severed from the top stroke either on top or on the side or in both places. The downstroke is short in Eg., long in Oss. *Resh :* The top stroke is a narrow, sometimes medium wide curve or tick, as in Eg. In Gez., we have a narrow top bar, in Oss. a very wide one. *Shîn :* The outer strokes are slanting and only slightly curved, or else straight. They meet at a point on the line bottom so that the letter is triangular in outline. The inner stroke is straight and therefore ends rather low down on the left stroke. Shîn tallies with Eg. and Oss. There is no example of the Oss. form with the left hand stroke produced downwards, occasionally considerably so. (In Oss. this type is more frequent than the other one.) *Taw :* A small curved or slanting upstroke turns downwards at the line ceiling and runs, slightly curved or almost straight, to the line bottom. This is the right hand part of the letter. On the left there is a generally rather wavy downstroke, starting sometimes above the line ceiling. It does not extend below the line bottom. Its small end curve is now and then flattened into a foot. In Eg. the letter is less formalised : the right hand stroke is more curved, the left one more wavy and much longer. Cov. corresponds to Gez., Oss., Uz. and Hel., but in them the letter is more formalised : there is a top bar, the downstrokes are straight.

Our comparison has made it clear that nearly all the letters differ distinctly from their counterparts at both ends of the period in question, so that the time of our MS. must lie between them, say approximately somewhere between 200–50 B.C.E.

Some of the letters have greater affinity with the forms of Eg. than of Oss. : Beth, Daleth, Zayin, Heth, Teth, Yodh, Kaph, Samekh, Resh. Others are closer to Oss. : Aleph,



THREE ALPHABETS DRAWN, SLIGHTLY ENLARGED, FROM THE COVENANT SCROLL, COL. I.



PLAN OF THE JERASH FORUM (OMITTED FROM THE LAST ISSUE).

Gimel, Waw, Lamedh, Mem, Final Mem, Nûn, Ayin, Pe, Qoph, Taw. In considering whether there is any preponderance in favour of either the earlier or the later age, we find that the scales are equally balanced. Hence the second half of the second century B.C.E. suggests itself as the time when the Covenant Scroll was written. The writing is thus more recent than that of the Isaiah Scroll, which was written in the previous half-century[1] but earlier than the Habakkuk[2] and Hodhayoth Scrolls , which I ascribed to the first half of the first pre-Christian century[4].

I have since compared in detail the script of the Isaiah Scroll with that of the Nash Papyrus and dated the former as belonging to the second quarter of the second pre-Christian century. To allow for the fact that the script of the Covenant Scroll is distinctly younger than that of the Isaiah Scroll, the former must not be placed early in the period in question. Hence my date for the Covenant Scroll is about the last quarter of the second pre-Christian century.[5]

(The alphabets accompanying this study (see Pl. XXII) have beendrawn by me from a photograph of column 1, published in BASOR 111 : 10.)

[1] See my dating in BASOR 113, February, 1949.

[2] See " The Date of the Habakkuk Cave Scroll," JBL 68 : 161-168.

[3] A study of the script of the Hodhayoth Scroll is ready for publication.

[4] Long after the present article had been handed in for publication (March), it became known that the fragments of the jars which had contained the Cave Scrolls had been excavated and dated by pottery experts as belonging to the late Hellenistic period, the latest possible date given being the early first century B.C.E. This is in keeping with our palæographical results.

[5] See my article " The Dates of the Cave Scrolls," BASOR 115, October, 1949.

REVIEWS AND NOTICES

Stratigraphie Comparée et Chronologie de l'Asie Occidentale (III^e et II^e millénaires) par CLAUDE F. A. SCHAEFFER. (Oxford University Press, 1948. Pp. xiii + 653, with LXX plates, 324 figures, IX synoptic tables and map).

This imposing and copiously illustrated volume is a most valuable contribution to the archæology of the Near East, an achievement rendered all the more remarkable by the circumstance that the author's varied services as an officer of the Free French Navy seriously interrupted its composition. It is distressing to be told that his home at St-Germain-en-Laye was pillaged by the Gestapo and hundreds of his books burnt, only part of his library being preserved thanks to the intervention of a German savant, H. Moebius.

For students of archæology the outstanding merit of M. Schaeffer's work will seem to lie in the minutely detailed examination to which he subjects a vast number of excavated sites in Syria and Palestine, Asia Minor and Cyprus, Persia and the Caucasus, thus bringing together and illustrating a mass of material which—as a bibliography of ten pages sufficiently attests—must be the fruit of many years' research. The author, however, does not propose to content himself with accumulating material and assigning it to the appropriate chronological phase ; the method expounded in his first chaper is more original and perhaps more ambitious.

In the course of his enormously successful excavations at Ras Shamra, the ancient Ugarit, M. Schaeffer observed, at various levels, a number of sterile layers, each betokening a catastrophe that formed a landmark in the history of Ugarit. He is convinced that these token layers (*les couches-témoins*) are not peculiar to Ras Shamra, but that they can be detected in the stratigraphy of most contemporary sites in Syria and Palestine and even in Asia Minor, some of them attributable to destruction by hostile invaders, others to the

action of earthquakes which, as he justly points out, may have affected a wide area. Comparative Stratigraphy, then, is to be understood as a method of research that serves to determine the relative and absolute chronology of numerous sites by reference to the ascertained dates of the corresponding strata in the ruins of Ugarit.

In practice this method has considerable advantages. It involves a careful comparison of material from various sites as well as a critical scrutiny of the views put forward by the excavators—views which may sometimes prove to be mistaken. Nevertheless, there are difficulties inherent in a method which to be successful requires not only an unbiassed use of evidence but the absence of any serious doubt about the date of each catastrophe at the key site.

At Ras Shamra the following token-levels were observed : (i) Just below the surface, evidence of the final destruction of Ugarit at the end of the Late Bronze Age, c. 1200 B.C. ; (ii) signs of a severe earthquake during the Amarna period, approximately 1365 B.C. ; (iii) a partial abandonment of the site from c. 1650 to c. 1550 B.C. ; (iv) destruction by fire at the end of the Early Bronze Age, between 2100 and 2000 B.C. ; (v) a similar catastrophe in the 24th century (commonly referred to c. 2300 B.C.). In addition, we note that the Egyptian domination at Ugarit under the XIIth and XIIIth Dynasties is held to begin about 1900 and to end soon after 1750, and that layers of destruction believed to date from about 1730 B.C. are observable at numerous sites.

These successive dates form a framework for the analysis of each excavated site, but the discussion throughout is detailed and fully documented and illustrated. Thirty-two pages are devoted to Ras Shamra, pp. 40–121 to various Syrian excavations, pp. 122–214 to those of Palestine ; Asia Minor and Cyprus are dealt with on a no less ample scale. Chapters on Persia and the Caucasus are followed by one entitled *Résumé et Conclusion* (pp. 534–567) after which come Addenda and Appendices, of which one treats of connexions with China. In all this there are no wasted pages ; when

necessary M. Schaeffer develops his argument at length, but for the most part the 241 sections into which the text is subdivided consist of solid descriptive matter, clearly and readably set forth in the manner to which the French language is so perfectly adapted. It is obvious that a review can touch upon only a small number—including some of the more debatable—of the questions raised in such a work as this, so the important sections on Persia (including a full discussion of the Luristan bronzes) and on the Caucasus region, with much else, must be passed over without comment.

The traces of an earthquake in the course of the Late Bronze period (Niveau I) at Ugarit seem to tally well enough with the events referred to in a letter of Abimilki of Tyre dating from about 1365 B.C. ; but it must be remembered that this was an age of political disturbances sufficient to have occasioned the destruction of buildings at sites not affected by the earthquake.

The chronology of the Middle Bronze Age between about 1900 and 1600 B.C. involves more complicated problems. M. Schaeffer distinguishes two periods, *Ugarit Moyen 2*, lasting till about 1750 and characterised by Egyptian Middle Kingdom monuments, and *Ugarit Moyen 3* from 1750 to 1600 ; the end of Egyptian domination, soon after the middle of the 18th century, being followed by a period of decline, with few archæological remains, culminating in a partial desertion of the site. The dividing line between the two periods is marked by the systematic mutilation or destruction of Egyptian monuments, which is assumed to have taken place about 1730 B.C. at latest, when Egypt herself succumbed to Asiatic invaders. Some of these monuments are of the XIIth Dynasty, and the chamber-tombs pertaining to the same occupation-level are consequently dated between 1900 and 1750. Tombs of this type, however, might continue in use for a long time, and it seems to us that the author is inclined to date some of their contents too early, thus tending to exaggerate the length of the period of decline towards the close of the Middle Bronze Age ; it appears, indeed, that some of the finds which he now dates

c. 1650 B.C. or earlier were attributed to the 16th century when they first came to light. M. Schaeffer's change of opinion on this point is due, in part at least, to his conviction that a number of so-called Hyksos scarabs should be assigned to the XIIIth, or even to the end of the XIIth, Dynasty.

In this connection too much importance seems to be attached to the hieroglyphic signs noted in Mr. Alan Rowe's Catalogue of Scarabs in the Jerusalem Museum as reproducing elements of royal names of the Middle Kingdom, without regard to the fact that inscriptions of this kind are by no means always contemporary with the rulers whose names they seem to imitate. We may note, too, that the generally accepted dating for the reigns of Khian and Apopi I, of the XVth Dynasty, is the second half of the 17th century, not the *début* of the period 1730–1580 B.C. (p. 165). Without venturing to dispute M. Schaeffer's claim to have observed a phase of impoverishment forming a break between the Middle and Late Bronze cultures at Ugarit, we are not convinced that this phase should be made to cover so much of the duration of Hyksos rule in Egypt.

A cylinder-seal from chamber-tomb LVII (Fig. 5 on p. 31) assigned to the age of Hammurabi on account of its style, displays the Egyptian Ankh symbol and is therefore regarded as dating from the period of Egyptian domination, before 1730 B.C. This is held to be in favour of Professor Sidney Smith's reckoning for the reign of Hammurabi, 1792–1750, as against Professor Albright's, 64 years later. Even so, we doubt whether all the pottery from the same tomb (Figures 47 and 48) can be affirmed to be not later than c. 1700 B.C. (p. 31) An object such as this seal may have been in existence for a considerable time before finding its way into a tomb—longer, perhaps, than the author is as a rule disposed to allow, to judge from his remarks on p. 473.

As to the excavations of Byblos, M. Schaeffer finds fault with M. Dunand's method of proceeding by rigorously horizontal layers without regard to the depths of the occupation levels, which vary in different parts of the site. It is,

nevertheless, possible to distinguish a lower level, which he terms *niveau III*, containing Egyptian objects of the Old Kingdom, from the later *niveau II*, the two being separated by a thick layer of ashes. The destruction by fire of *niveau III* is assigned to the 24th century (c. 2360 according to the excavator) and is related to the period of confusion that followed the reign of Pepi II ; the site of Byblos seems to have afterwards been deserted for a long period. The principal building on the upper level, *Bâtiment II*, or the Syrian Temple, dates from the Middle Kingdom, but there is considerable difference of opinion concerning the date of the various foundation-deposits discovered underneath its floor. M. Dunand is disposed to attribute all of these to the time of Amenemhat III, c. 1800 B.C., but M. Schaeffer believes some of them to be older, including the well-known painted jar found in the course of M. Montet's excavations.

Basing his argument on the forms of the torques and early toggle-pins among the bronze objects in this jar (some of which have proved to contain a high percentage of tin) he would date the deposit before rather than after 1900 B.C. But unfortunately the scarabs and other seals (ring-bezels) from the same jar, published by M. Montet (*Byblos et l'Egypte*, pp. 119 ff.), though more than a hundred in number, are ignored—except for occasional subsequent references, as in connexion with finds at Jericho, where we find them treated as of the beginning of the XIIth Dynasty (p. 135) and earlier than 1900 B.C. (p. 141). This seems an impossibly high dating ; on the whole the designs—in which concentric circles occur very frequently—are typologically later than impressions found by Reisner at Uronarti from seals in use at the beginning of the XIIIth Dynasty, as has been pointed out by Professor Albright, whose opinions on this question seem to have been misunderstood (*see* pp. 58 and 135). It follows that M. Schaeffer's date for this important foundation-deposit needs to be reduced by at least a century, though it does not follow that the contents of the jar must be all of the same age.

We find, as we might expect, no doubts expressed about

accepting the widely held opinion (for which M. Dussaud's authority is cited at p. 175) that the typical Tell-el-Yehudiyeh ware—black juglets with punctured decoration—made its appearance fairly early in the XIIth Dynasty period, presumably, about the beginning of the 19th century B.C. This view is emphatically repudiated by M. Dunand (*Byblos I* pp. 236 f.) and the evidence from Egypt on which it was originally based is very far from being conclusive ; it seems best to assign the appearance of Tell-el-Yehudiyeh ware to the beginning of the XIIIth Dynasty, or about 1800 at the earliest.

In his treatment of the excavations on Palestinian sites (Chapter V) M. Schaeffer seems predisposed by his viewss on the foregoing questions to attribute the earliest possible dates to a number of Middle Bronze levels and tomb-groups, thereby laying an emphasis which seems to us excessive on the poverty of the Hyksos period from c. 1650 B.C. onwards. In this connexion we may observe that the suggested hiatus between the Middle and the Late Bronze Age cannot have occurred simultaneously at every site ; the " bichrome " painted ware (*poterie bicolore*) which is abundant at Tell el-Ajjul, Megiddo and Tell ed-Duweir, as well as at Ugarit, is absent from Tell Beit Mirsim and Fara (" Beth-Pelet "), perhaps because both of them were deserted after the expulsion of the Hyksos from Egypt and the invasion of southern Palestine.

At Megiddo bichrome pottery is typical of Stratum IX, dated to the early XVIIIth Dynasty, before the capture of the town by Thothmes III. Some examples are assigned to the earlier Stratum X and the painted decoration which characterizes them has consequently been supposed to have made its appearance in Palestine before 1550 B.C. (From Mr. G. Loud's recent publication, Megiddo II, it now appears that the bichrome pottery of Stratum X is confined to three tombs. Indeed, the pottery of Strata XV–IX to a very large extent comes from burials on the Tell ; this kind of stratification is perhaps not so satisfactory as that obtained from well demarcated occupation-levels). M.

Schaeffer's suggested dates for Stratum X—taken to be contemporary with *Ugarit Moyen 3*—extend from 1750 to 1600 or 1550 B.C., those of Strata XIII to XI from 1900 to 1750 (and perhaps he would include XIV in this period). We fail to see the necessity to abandon the excavators' (admittedly somewhat arbitrary) dating, *c.* 1650–1550, for Stratum X, in order to treat it as a long-drawn-out zone of contact between Middle and Late Bronze.

When discussing the Middle Bronze Age finds from Jericho, M. Schaeffer—true to his conviction that the scarabs from the Byblos foundation-deposit are of the XIIth Dynasty—is disposed to reduce the dates suggested by Professor Garstang and to attribute as much as possible of the material to the first half of the 17th century, at latest, rather than to the later Hyksos period. This involves arguing for a long hiatus between the Middle and the Late Bronze Age, particularly in Tombs 4 and 5, both of which seem to have been in use more or less continuously (unless the absence of bichrome pottery be proof of an interruption) from the Hyksos period till the XVIIIth Dynasty. M. Schaeffer, however, appears to be right in contesting Mr. Rowe's attribution of a scarab in Tomb 31 to Kames, the immediate predecessor of the XVIIIth Dynasty. One could wish that the same standard of criticism were applied to the scarabs attributed in this volume to Sesostris I and II of the XIIth Dynasty. Although their inscriptions are admitted (with reference to Tell el-Ajjul in particular) to be *rarement irréprochables*, those of Sesostris I are repeatedly described as inaugurating the series of scarabs at a number of sites—Tell Beit Mirsim, Megiddo, Gezer amongst others —without any justification that we can discover.

The end of the Late Bronze occupation of Jericho may, it is suggested, have occurred about 1365 B.C., and have been due to the earthquake that devastated Ugarit. This date is not an impossible one, since the latest datable object seems to be a scarab of Amenophis III. The same event is thought of as responsible for the end of Stratum C I at Tell Beit Mirsim (which Professor Albright placed about

the middle of the century) and also for the end of Level VII on Tell el-Hosn at Beisan. This, however, is an error, for which the present reviewer is more to blame than M. Schaeffer. A less comprehensible slip concerns the Fosse Temple at Tell ed-Duweir (Lachish), where the rebuilding known as Structure II is misdated to the middle of the 15th century B.C., although it is stated in the publication (Lachish II, p. 20 and p. 68–9) that a plaque with the cartouche of Amenophis III was found underneath one of its walls.

With regard to Beisan (Beth-shan) we have to recognize that Levels IX to V were wrongly ascribed to the period ranging from Thothmes III to Rameses II or III. Level V must now be dated to the Iron Age, VI to Rameses III, Level VII to the XIXth Dynasty and IX, together with a partial rebuilding called Level VIII, mainly to the 14th century. All this was pointed out in 1938 (A.A.S.O.R. XVII, pp. 76 f.) by Professor Albright—who agreed that the evidence of scarabs and stelae was strangely misleading —but unfortunately Mr. Rowe's long-delayed publication, "The Four Canaanite Temples," did not embody the corrections. We ought to have discarded earlier the use of the names of Egyptian rulers to describe the levels—a system perhaps excusably adopted in the early years of the excavations (1921–3) by the late Dr. Fisher. M. Schaeffer has also been misled in several particulars relating to the lower levels of the Tell by the present reviewer's provisional reports ; for example, further excavation is needed to explain the significance of the layer of debris, containing Middle and Late Bronze pottery, below Level IX ; the burials on the Tell, as well as Levels XA and XB can be classed as Middle Bronze II ; Level XI produced pottery of the same period side by side with far earlier material, including the finely burnished Khirbet Kerak ware which seems to have been first introduced during the occupation of Level XII. (Some MBI pottery, quite correctly included in Fig. 152, nos. 25, 28, 31, 39, as coming from Level XII, must now be regarded as in some sense intrusive).

The range proposed for Khirbet Kerak ware, *c.* 2300 to 2100 B.C., is somewhat later than that favoured by Dr. G. E. Wright (Pottery of Palestine . . ., 1937, p. 73), who considers a date between 2600 and 2300 B.C. for its appearance in Palestine to be well established. In any case the destruction by fire of a building in Level XIII seems to have taken place long before the " token-level " date 2300 B.C. and to have no connexion with the arrival of Khirbet Kerak ware at Beisan. At Hama, in Syria, this pottery was found in Level K, below a layer of destruction for which the excavator's date is *c.* 2500, M. Schaeffer again suggesting *c.* 2300 B.C. (p. 109).

At Beisan the rock-cut tombs rightly judged to be earlier than 2000 B.C. (p. 191) are situated not on the Tell but in the Cemetery ; they still await final publication. It is a pity that the copper weapon, Fig. 155, 1, was known to M. Schaeffer only from a photograph (cf. A. Rowe, Beth-shan Topography and History, Pl. 15, 1) ; this so-called javelin is in fact exactly like the *stylets*—square in section, with a bent tang—found in the great tomb at Til Barsib (p. 83, Fig. 182, 7). Thanks to the wide scope of his researches M. Schaeffer is able to illustrate weapons of the same form, and probably of about the same date, from such distant sites as Soli in Cilicia (Fig. 174, 8) and Tepe Hissar in Persia (Fig. 239, 8, 9) and to cite the analogy of the " poker spears " from the Royal Tombs of Ur (pp. 277, 449)

This is but one instance among scores of the assembling of material from diverse sources for comparison. By his skilful use of this system the author makes contributions to the study of archæology for which even the most critical of his readers must be deeply grateful.

Chapter VI deals with Asia Minor and includes a long section (pp. 215–262) devoted to the mound of Hissarlik, accepted as the site of Troy. As is well known, Schliemann and Dörpfeld, excavating between 1870 and 1894, eventually distinguished nine stratified settlements (subdivided since then into numerous phases) of which at first the " Third

City" and later the "Sixth City"—counted from the lowest upwards—was supposed to have been the scene of the Trojan War. More recently, the excavations begun in 1932 by Mr. C. Blegen on behalf of the University of Cincinnati have shown that it is only Level VIIA that can claim to represent Homer's Troy.

Dörpfeld finally arrived at the conclusion that the Third City was to be regarded as a quite insignificant settlement; consequently, the level below it—Troy II—has been accepted as the seat of a highly developed Early Bronze Age civilization which forms an important link in archæology between Asia and Europe. In particular a number of deposits or hoards comprising gold and silver vases and ornaments and bronze or copper weapons have been attributed to Troy II—amongst them the so-called Treasure of Priam.

M. Schaeffer maintains a different view and applies himself to the rehabilitation of Troy III; his arguments—developed at length and supported by plans, diagrams and numerous citations from the excavators' reports—may be summarised as follows: (i) Schliemann, influenced by Dörpfeld's *idée fixe* that Troy III was merely a poor village, was mistaken in recanting his earlier impression of the importance of that level; (ii) the Treasure of Priam and other hoards—not damaged by fire—were found in or above the ashes of the conflagration that destroyed Troy II; (iii) these treasures are a century or two later in date than the destruction of Troy II, which must have taken place about 2300 B.C.; (iv) a fortification wall twelve to sixteen metres wide and at least one megaron—probably more than one—should be credited to Troy III, not, as at present, to Troy II; (v) the line of demarcation between II and III should be the stratum lying about 7·20 metres below the datum rather than one at 6·20 metres, which Mr. Blegen takes as the dividing-line. M. Schaeffer also establishes analogies between the objects from the hoards and finds from Asia Minor, Syria and elsewhere dated to the last centuries of the third millennium.

The position of the American expedition as recently

stated by Mr. J. L. Caskey (A.J.A., 1948, p. 120) is that there were seven phases of Troy II, four of which occurred between the building of Megaron A (Phase II*c*) and the destruction by fire of Phase II*g* ; the treasures belonged almost certainly to the last of the seven. Although the designation Troy II is to be maintained for this phase it is conceded that Schliemann's earlier numbering, III, can be supported with logic.

It appears therefore that although M. Schaeffer and Mr. Blegen may appear to be agreed in dating the destruction of Troy II by a conflagration about 2300 B.C., the former really has in mind a burnt layer at a lower level than that which marks the destruction of Phase II *g*. The important question is what limits of date we should assign to the civilization that produced the Treasure of Priam and other hoards of jewellery ; let us hope that this will be finally settled by the publication of the results of the American excavations. Troy II has by now come to be so firmly associated with the objects in question (as a glance at any work dealing with the Bronze Age will show) that it seems desirable to retain that designation at almost any sacrifice of logical consistency.

The presence of some Early Helladic pottery types in Troy V, as well as in III and IV, is deemed to involve including all three in the Early Bronze Age. After the end of Troy V about 1950–1900 B.C. (the latter being Mr. Blegen's dating) M. Schaeffer suspects that the site was deserted, perhaps for three centuries. It is common ground that the destruction of Troy VI was due to a devastating earthquake, but any temptation to synchronize it with the catastrophe of 1365 B.C. at Ugarit is resisted. Even so, M. Schaeffer differs from the excavators in placing it in the middle rather than in the second half, or at the end, of the 14th century ; the issue depends on the precise dating of the Mycenean pottery found in the Sixth City.

In his interesting chapter on the chronology of the Bronze Age in Cyprus the author discusses at some length (pp. 331, ff., p. 398) the Red Polished ware of the island

and concludes, on the strength of his own excavations at Ras Shamra and at Vounous, that the dates hitherto accepted for its appearance in Cyprus (2600 or even 3000 B.C.) are too early. His contention is that this ware became preponderant only from about 2300 B.C. and survived till 1800 B.C. M. Schaeffer refers incidentally to the undecorated jar of Palestinian or Syrian origin found by Mr. J. R. Stewart at Vounous ; he would date it between 2300 and 2100 B.C. rather than before 2500, as Mr. Stewart and others have proposed. The evidence adduced by M. Schaeffer is partly based on synchronisms with Khirbet Kerak ware at Ugarit and with Syrian pottery which may be contemporary with Level XII at Beisan or with Tomb A at Jericho. We have already observed, with reference to Khirbet Kerak ware, that his absolute dating is lower than that of Dr. Wright ; it is probable that most Palestinian archæologists would agree with the latter in equating this phase of the Early Bronze Age with the Pyramid Age of Egypt.

Considering the differences of opinion that exist about many of the questions we have touched upon, we are afraid that this volume will fail to win that general agreement with the author's views which seems essential to the acceptance of his method of Comparative Stratigraphy as a guide to chronology. But that need not blind us to the great importance of M. Schaeffer's work or make us less ready to welcome a promised volume on earlier periods.

G. M. FitzGerald.

The Committee acknowledges with thanks the following :

Antiquity No. 90, June, 1949, No. 91, September, 1949.
American Journal of Archæology. Vol. LIII, No. 1, January-March, 1949. No. 2, April-June, 1949. No. 3, July-September, 1949. Vol. LII, Supplement, 1948.
Journal of the Royal Anthropological Institute. Vol. LXXV, Nos. 1 and 2, 1945. Vol. LXXVI, No. 1, 1946.
Transactions of the Victoria Institute. Vol. LXXIX, 1947.
Journal Asiatique. Vol. CCXXXVI, Nos. 1 and 2, 1948. Vol. CCXXXVII, No. 1, 1949.
Harvard Theological Review. Vol. XLII, No. 1, 1949. No. 2, 1949.
Biblica. Vol. 30, No. 2, 1949. No. 3, 1949.
Biblical Archæologist. Vol. XII, No. 2, 1949.
Journal of the American Oriental Society. Vol. 69, No. 2, April-June, 1949.
Bible Lands. Vol. XII, No. 3, July, 1949.
Geographical Review. Vol. 39, No. 3, July, 1949.
Bulletin, University Museum Philadelphia, U.S.A. Vol. XIV, No. 1, June, 1949.
Connecticut Academy Transactions : New Discoveries at Karatepe. No. 38, May, 1949.
Bible Archæological Digest. Vol. IV, No. 2, April-June, 1949.
American Journal of Philology. Vol. LXX, No. 3, July, 1949.
Bulletin, Jewish Palestine Exploration Society. Vol. XIV, 3-4, April, 1948 to March, 1949.
Quarterly Dept. of Antiquities in Palestine. Vol. VII, 1938.
Scottish Geographical Magazine. 65 Vol. No. 1, April, 1949.
Expository Times. Vol. LX. No. 8, May, 1949, No. 9, June, 1949, No. 10, July, 1949, No. 11, August, 1949, No. 12, September, 1949.
Nouvelle Revue Théologique. Vol. 71. No. 4, April, 1949, No. 5, May, 1949, No. 6, June, 1949, No. 7, July, 1949.
Journal of Near Eastern Studies. Vol. VII, No. 2, April, 1949, No. 3, July, 1949.
Revue Biblique. Vol. 56. No. 1, January, 1949, No. 2, April, 1949, No. 3, July, 1949.

Bulletin, American Schools of Oriental Research. No. 113, February, 1949, No. 114, April, 1949.
Scripture. Vol. IV, No. 2, April, 1949, No. 3, July, 1949.
Religions. No. 66, May-August, 1949, No. 67, September-December, 1949.
News of the Yivo. No. 32, April, 1949, No. 33, June, 1949.
Jewish Quarterly Review. Vol. 39, No. 4, April, 1949. Vol. 40, No. 1, July, 1949.
Zion. Vol. XXV, No. 1, August, 1949.
Syria. Vol. XXVI, Nos. 1 and 2, 1949.
"*Die Romische Flotte in Palestina-Syrien.*" By Dr. Peter Thomsen.
"*The Structural History of the Aqsa Mosque.*" By R. A. Hamilton.

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PALESTINE EXPLORATION FUND

ANNUAL REPORT

AND ACCOUNTS

WITH

LIST OF SUBSCRIPTIONS

FOR THE YEAR 1949

PALESTINE EXPLORATION FUND
2 HINDE STREET, MANCHESTER SQUARE, LONDON, W.1

THE PALESTINE EXPLORATION FUND

SOCIETY FOR THE ACCURATE AND SYSTEMATIC INVESTIGATION OF THE ARCHAEOLOGY, THE TOPOGRAPHY, THE GEOLOGY AND PHYSICAL GEOGRAPHY, THE MANNERS AND CUSTOMS OF THE HOLY LAND, FOR BIBLICAL ILLUSTRATION.

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VICE PRESIDENTS—HIS GRACE THE ARCHBISHOP OF YORK;
THE RT. REV. THE BISHOP OF LAMUS (BISHOP AUXILIARY OF WESTMINSTER);
SIR HENRY DALE, O.M., G.B.E., F.R.S.;
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THE DIRECTOR OF THE ISLAMIC CULTURAL CENTRE

The Society was established on the basis of the following rules:—

1. It was not to be a religious society. That is to say, it should be pledged not to advocate or attack any form of creed or doctrine.
2. It was not to adopt or to defend any side in controversial matters.
3. It was to be conducted on strictly scientific principles.

These rules have been jealously observed. The Society's organ, the PALESTINE EXPLORATION QUARTERLY, is open to all opinions, while it records as facts only the actual discoveries and results of its exploring officers. Although the Society is not a religious society, strictly so called, its work necessarily possesses unusual interest for Bible Students of all denominations, who find in the results obtained by exploration much that confirms and illustrates the historical truth of both the Old and New Testaments. In the course of its existence, the Society, with limited funds at its disposal, has done an immense amount of work, and published the results in books, papers, maps, plans and photographs, primarily for the benefit of its subscribers, and for the advantage of students of the Sacred Scriptures.

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PALESTINE EXPLORATION FUND

ANNUAL REPORT FOR THE YEAR 1949

It is with the deepest regret that the Executive Committee has to record the death of Stanley Arthur Cook on 26th September, 1949. Stanley Cook was Editor for the Palestine Exploration Fund for thirty years, from 1902 to 1932 when he became Regius Professor of Hebrew at Cambridge. It would be difficult to exaggerate the debt which this society owes him. He was an almost perfect editor. Of his service to scholarship in the field of Old Testament studies, this is not the place to speak, but something of its length and importance may be gauged from the fact that his first published work came out in 1896 and the last appeared in 1948.

The widest interest has been excited by the discovery of some ancient scrolls in a cave near the Dead Sea.

Rumours about the discovery began to reach us in 1948. At first there were sceptics who recalled the famous forgeries of Shapiro in the last century, but all shadow of doubt about the genuineness of the documents has been since dispelled, and four meetings of the Fund have been devoted to the discovery, two of them in 1949.

At a special meeting last summer we had the pleasure of welcoming both Dr. Albright and Mr. Harding: in a brilliant lecture, Dr. Albright gave us the impressions made on him by a study of the photographs and such of the originals as had reached America, and Mr. Harding told the story of his visit to the cave with Père de Vaux, a story which has appeared since in the Quarterly. Some tiny fragments of papyri and parchment or leather collected by him were placed on view, and Dr. Plenderleith added a few remarks on the dark substance formerly mistaken for pitch which was found adhering to the leather.

At a second meeting held in October, Dr. Diringer discussed the early Phoenician script used on a few fragments and in some words in others that were written in the square Hebrew characters, and Mrs. Crowfoot gave a brief account of the linen wrappers round the scrolls which had been sent to her for examination.

Six lectures in addition to the two already mentioned were given in the course of the year. On 15th February, Mr. J. N. Schofield lectured on "Archaeology and Old Testament ideas of the hereafter"; on 15th March, Lady Drower lectured on "The Mantle of the Magi"; and on 17th May, Mr. R. D. Barnett lectured on "The Decipherment of the Hittite Hieroglyphs". At the Annual Meeting on 21st June, Dr. Sidney Smith lectured on "Southern Arabian Kingdoms: Recent Developments in Research": on 23rd November, Mrs Crowfoot lectured on "Folk Tales from Artas", and on 13th December, Dr. Margaret Murray on "Gaza and Canaanite Scarabs".

The Committee desire to express thanks for the following contributions to the Palestine Exploration Fund Quarterly: "Recent Work on the Jerash Forum", by Lankester Harding; "Epigraphic Discoveries at Karatepe", by A. M. Honeyman; "The Baths at Khirbat Mafjar", by R. W. Hamilton; "Note on a Phoenician Papyrus from Saqqara", by A. Dupont-Sommer; "Kurdaneh", by J. J. Rothschild; "Sacrifice among the West Semites", by D. M. L. Urie; "Some Canaanite Scarabs", by M. A. Murray; "The 'Chair of Moses' and its Survivals", by Cecil Roth; "The Dead Sea Scrolls", by Lankester Harding; "On Hurrians and Subarians", by Sidney Smith; "The Rephaim", by John Gray; "The Date of the Covenant Scroll", by S. A. Birnbaum.

Conditions in Jerusalem throughout the year continued to cause anxiety about the safety of the Antiquities Museum, and the Committee has beeen in correspondence with U.N.E.S.C.O. on the subject. We have been relieved lately to hear that the damage suffered by the building is slight, and some of the collections are already open to the public. The International Board of Trustees appointed under an Order in Council issued by the last High Commissioner, met in Amman on the 12th December, 1949; the Director of the American School in Jerusalem was then selected to be President of the Board and Mr. Harding's appointment as Acting Curator confirmed.

In order to extend the scope of the Fund's activities a small committee has been at work preparing a series of film strips for use in schools to illustrate the exploration of Palestine and the Bible Story.

The accounts reflect a slight though satisfactory improvement in the position of the Society. A debit balance on current income and expenditure of £1 : 1 : 2 (generously wiped out by an *ad hoc* donation by a subscriber) has been converted into a credit balance of £65 : 15 : 6. This improvement is due to the fact that non-recurrent items, mainly arrears of expenditure on the library, were included in the 1948 accounts, while income from subscriptions has improved. New individual subscribers number 32, and new library subscriptions 14, as against 17 losses through death or resignation. It must be remembered however, that the Fund has increased responsibilities for publication of research with the suspension of the Quarterly of the Department of Antiquities, while essential expenditure on the library is likely to grow. New subscribers are much needed, and present subscribers are earnestly asked to sign Covenants which nearly double the value of their subscriptions at no cost to themselves.

Signed on behalf of the Executive Committee,
J. W. Crowfoot, *Chairman.*
C. B. Mortlock, *Hon. Secretary.*

May, 1950

PALESTINE EXPLORATION FUND, 1949

BALANCE SHEET, 31ST DECEMBER, 1949

	£ s. d.	£ s. d.
CAPITAL:—		
Authorized—200 Shares of £1 each	200 0 0	
Issued—10 Shares of £1 each, not called		—
SURPLUS OF ASSETS OVER LIABILITIES (Excluding donated property)		
Amount as per last Balance Sheet	3,543 3 4	
Add: Excess of Income over Expenditure for year	64 15 6	3,607 18 10
CURRENT LIABILITIES:—		
Sundry Creditors for Current Expenses	170 0 8	
Archaeological Survey of Palestine	91 13 3	
Subscriptions in Advance	91 16 6	
		353 10 5
		£3,961 9 3

	£ s. d.	£ s. d.
FIXED ASSETS:—		
Freehold Property—Donated—No. 2 Hinde Street (estimated value £5,000)		
Alterations and Improvements No. 2 Hinde Street, at net book value 1st July, 1948		1,188 17 5
Museum, Library and Storeroom, Fixtures, Fittings, Furniture, etc., at net book value 1st July, 1948		382 2 7
Typewriter at cost	39 10 0	
Less: Depreciation	3 10 0	
		36 0 0
Jewish Colonial Trust—Donated—50 Ordinary Shares of £1 each, fully paid ...		—
		1,607 0 0
CURRENT ASSETS:—		
Stock of Publications, Maps, Books, Models, Lantern Slides, Library and Antiques	—	
Subscriptions in arrear	14 12 6	
Rent Receivable in Arrear	50 0 0	
	64 12 6	
Investments—Post Office Issue—at cost		
£374 12 0 3½ per cent. Conversion Stock ...	400 0 0	
50 0 0 3 per cent. Savings Bonds 1955/65	50 0 0	
300 0 0 3 per cent. Defence Bonds ...	300 0 0	
700 0 0 2½ per cent. Defence Bonds ...	700 0 0	
(market value £1,400)	1,450 0 0	
Cash at Bank and in hand	311 5 3	
Post Office Savings Bank	528 11 6	
	839 16 9	
		2,354 9 3
		£3,961 9 3

AUDITORS' REPORT TO THE MEMBERS OF THE PALESTINE EXPLORATION FUND

We have examined the above Balance Sheet, Receipts and Payments Account and Income and Expenditure Account which are in agreement with the Fund's books of account and we have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purpose of our audit. Proper books of account have been kept by the Fund, so far as appears from our examination thereof.

In our opinion and to the best of our information and according to the explanations given to us, the said Accounts give the information required by the Companies Act, 1948, in the manner required and present a true and fair view of the state of affairs as at 31st December, 1949 and of the excess of Income over Expenditure for the year.

19 COLEMAN STREET,
LONDON, E.C.2.
24th April, 1950

TURQUAND, YOUNGS, MCAULIFFE & CO.,
Chartered Accountants.

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1949

RECEIPTS	£ s. d.	£ s. d.
To Balance—31st December, 1948—		
At Bank and in hand	114 5 7	
Post Office Savings Bank	515 14 0	
		629 19 7
„ Subscriptions and Donations including Local Societies	462 18 3	
„ Subscriptions in advance	91 16 6	
„ Refund of Income Tax on Covenanted Subscriptions	47 4 2	
„ Sales of Publications	181 11 8	
„ Rents	600 0 0	
„ Dividends Received—Gross:		
On £374 12s. 3½% Conversion Loan — 13 2 2		
On £300 3% Defence Bonds — 9 0 0		
On £700 2½% Defence Bonds — 17 10 0		
On £50 3% Savings Bonds 1955/65 — 1 10 0		
	41 2 2	
„ Interest on Post Office Savings Bank	12 17 6	
„ Hire of Slides	10 0	
„ Proceeds of Sale of Typewriter	20 0 0	
		1,458 0 3
		£2,087 19 10

PAYMENTS	£ s. d.	£ s. d.
By Printing—Quarterly	394 2 6	
Leaflets and Lecture cards	82 1 4	
Annual Report	14 9 0	
		490 12 10
„ Library and Librarian	...	56 9 7
„ Salaries, Wages and Pensions	...	465 16 3
„ Repairs	...	20 3 6
„ Insurance	...	15 16 9
„ Rates	...	18 12 0
„ Lighting and Heating	...	39 15 4
„ Postage and Telephone	...	37 14 5
„ Stationery and Sundries	...	41 2 3
„ Lectures and Lantern Slides	...	11 12 2
„ Purchase of New Typewriter	...	39 10 0
„ Cheque Book	...	8 0
„ Audit Fee	...	10 10 0
		1,248 3 1
Balance, 31st December, 1949—		
At Bank and in hand	311 5 3	
Post Office Savings Bank	528 11 6	
		839 16 9
		£2,087 19 10

J. W. Crowfoot, *Chairman.*
Kathleen M. Kenyon, *Hon. Treasurer.*

INCOME AND EXPENDITURE ACCOUNT
FOR THE YEAR ENDED 31st DECEMBER, 1949

	£ s. d.	£ s. d.
Payments for the year as per Receipts and Payments Account	... ...	1,248 3 1
Less: Creditors at 31st December, 1948	104 5 3	
Purchase of New Typewriter	39 10 0	
Less: Proceeds from sale of old typewriter	20 0 0	
	19 10 0	
Less: Depreciation on new typewriter ...	3 10 0	
	16 0 0	
		120 5 3
		1,127 17 10
Add: Creditors at 31st December, 1949	170 0 8	
Payments in advance at 31st December, 1948	50 0 0	
		220 0 8
		1,347 18 6
Balance being excess of Income over Expenditure ...	... ...	64 15 6
NOTE:—£100 has been included in respect of remuneration to a member of the Executive Committee.		
		£1,412 14 0

	£ s. d.	£ s. d.
Receipts for year as per Receipts and Payments Account	... ...	1,458 0 3
Less: Subscriptions in arrear at 31st December, 1948	36 9 9	
Subscriptions in Advance	91 16 6	
		128 6 3
		1,329 14 0
Add: Subscriptions in arrear at 31st December, 1949	14 12 6	
Subscriptions received in advance at 31st December, 1948	18 7 6	
Rent receivable in arrear	50 0 0	
		83 0 0
		£1,412 14 0

NOTE: No depreciation for the year has been provided on Alterations and Improvements to No. 2 Hinde Street or on Museum, Library and Storeroom, Fixtures, Fittings and Furniture, etc.

LIST OF SUBSCRIPTIONS AND DONATIONS

RECEIVED BETWEEN 1st JANUARY AND 31st DECEMBER, 1949, INCLUSIVE

* Asterisks denote covenanted subscriptions

If any omission or mistake be observed in the following lists, the Secretary will be very glad to be informed of it, and will rectify the error in the next Annual Report.

	£ s. d.
Alford, Miss M. ...	1 18 2
*Arden-Close, Sir Charles	2 2 0
Arnold, Miss C. ...	2 2 0
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Baer, Dr. Flora... ...	2 2 0
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